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OM protein - protein search, using sw model

Run on: June 14, 2004, 08:01:06 ; Search time 59 Seconds

(without alignments)

871.587 Million cell updates/sec

Title: US-10-054-988-114

Perfect score: 182

Sequence: 1 MEQLGPEAAALRPGWALL.....DLVQDCHQGORELKFCLMLR 182

Scoring table: OJIGO

Gapop 60.0 , Gapext 60.0

Searched: 1586107 seqs, 282547505 residues

Word size : 0

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 5

Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database : A Geneseq_29Jan04.*

1: Geneseqp1980s.*

2: Geneseqp1990s.*

3: Geneseqp2000s.*

4: Geneseqp2001s.*

5: Geneseqp2002s.*

6: Geneseqp2003as.*

7: Geneseqp2003bs.*

8: Geneseqp2004s.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	182	100.0	182	3	AA91393 Human sec
2	182	100.0	182	4	AB95695 Human pro
3	182	100.0	182	6	ABU03563 Angiogene
4	182	100.0	182	6	ABR47459 Breast ca
5	182	100.0	209	3	AA91447 Human sec
6	127	69.8	182	4	AAU12257 Human PRO
7	127	69.8	182	4	AB48066 Human ext
8	127	69.8	182	6	AB017701 Novel hum
9	127	69.8	182	6	ABU08955 Human PRO
10	127	69.8	182	6	ABU66655 Human PRO
11	127	69.8	182	6	ABU59736 Novel sec
12	127	69.8	182	6	ABO24926 Human sec
13	127	69.8	182	6	ABU66931 Human sec
14	127	69.8	182	6	ADA45691 Novel hum
15	127	69.8	182	6	ADA76122 Human PRO
16	127	69.8	182	6	ADAL8772 Human PRO
17	127	69.8	182	6	ADA61395 Homo sapi
18	127	69.8	182	6	ADBI19180 Novel hum
19	127	69.8	182	6	ADB27721 Human PRO
20	127	69.8	182	6	ADA86200 Novel hum
21	127	69.8	182	6	ADBI15764 Human PRO
22	127	69.8	182	6	ADA47550 Human PRO
23	127	69.8	182	6	ADA67345 Human PRO
24	127	69.8	182	6	ADB30352 Human PRO
25	127	69.8	182	6	ADA85648 Novel hum

26	127	69.8	182	6	ADA96860 Human PRO
27	127	69.8	182	6	ADA79164 Human PRO
28	127	69.8	182	6	ADA87303 Novel hum
29	127	69.8	182	6	ADBI16505 Human PRO
30	127	69.8	182	6	ADA91597 Novel hum
31	127	69.8	182	6	ADBI14660 Human PRO
32	127	69.8	182	6	ADBI18621 Novel hum
33	127	69.8	182	6	ADA93836 Human PRO
34	127	69.8	182	6	ADBI19732 Novel hum
35	127	69.8	182	6	ADBI13044 Human PRO
36	127	69.8	182	6	ABO43234 Novel hum
37	127	69.8	182	6	ADA74298 Human PRO
38	127	69.8	182	6	ADB24531 Human PRO
39	127	69.8	182	6	ADA82055 Human PRO
40	127	69.8	182	6	ADA75018 Human PRO
41	127	69.8	182	6	ADA85096 Novel hum
42	127	69.8	182	6	ADA84544 Novel hum
43	127	69.8	182	6	ADB29800 Human PRO
44	127	69.8	182	6	ADA80328 Human PRO
45	127	69.8	182	6	ADA75570 Human PRO
46	127	69.8	182	6	ADA46795 Human PRO
47	127	69.8	182	6	ADB25091 Human PRO
48	127	69.8	182	6	ADA93267 Human PRO
49	127	69.8	182	6	ADB26617 Human PRO
50	127	69.8	182	6	ADB30904 Human PRO
51	127	69.8	182	6	ADA60832 Homo sapi
52	127	69.8	182	6	ADB23979 Human PRO
53	127	69.8	182	6	ADA96308 Human PRO
54	127	69.8	182	6	ADA80880 Human PRO
55	127	69.8	182	6	ADA95756 Human PRO
56	127	69.8	182	6	ADB26065 Human PRO
57	127	69.8	182	6	ADB21550 Novel hum
58	127	69.8	182	7	ADA77329 Human PRO
59	127	69.8	182	7	ADBI18069 Human PRO
60	127	69.8	182	7	ADA86752 Novel hum
61	127	69.8	182	7	ADA87855 Novel hum
62	127	69.8	182	7	ADA46243 Novel hum
63	127	69.8	182	7	ADB28273 Human PRO
64	127	69.8	182	7	ADB28825 Human PRO
65	127	69.8	182	7	ADA76777 Human PRO
66	127	69.8	182	7	ADA88407 Novel hum
67	127	69.8	182	7	ADA97412 Human PRO
68	127	69.8	182	7	ADB27169 Human PRO
69	127	69.8	182	7	ADB22102 Novel hum
70	127	69.8	182	7	ADA66793 Human PRO
71	127	69.8	182	7	ADB22654 Human PRO
72	127	69.8	182	7	ADB23427 Human PRO
73	127	69.8	182	7	ADA92149 Novel hum
74	127	69.8	182	7	ADBI15212 Human PRO
75	127	69.8	182	7	ADB38464 Novel hum
76	127	69.8	182	7	ADB37912 Novel hum
77	127	69.8	182	7	ADB66384 Novel hum
78	127	69.8	182	7	ADB89464 Human PRO
79	127	69.8	182	7	ADB90196 Human PRO
80	127	69.8	182	7	ADB39297 Novel hum
81	127	69.8	182	7	ADB46920 Novel hum
82	127	69.8	182	7	ADB86527 Human PRO
83	127	69.8	182	7	ADB77132 Novel hum
84	127	69.8	182	7	ADB34289 Human PRO
85	127	69.8	182	7	ADB35393 Human PRO
86	127	69.8	182	7	ADB33737 Human PRO
87	127	69.8	182	7	ADB34841 Human PRO
88	127	69.8	182	7	ADB35945 Human PRO
89	127	69.8	182	7	ADB46340 Novel hum
90	127	69.8	182	7	ADC50213 Novel hum
91	127	69.8	182	7	ADC71760 Novel hum
92	127	69.8	182	7	ADC59739 Novel hum
93	127	69.8	182	7	ADC52746 Novel hum
94	127	69.8	182	7	ADC57100 Novel hum
95	127	69.8	182	7	ADC60291 Novel hum
96	127	69.8	182	7	ADC50766 Novel hum
97	127	69.8	182	7	ADC65293 Human PRO
98	127	69.8	182	7	ADC54391 Novel hum

99 127 69.8 182 7 ADC53352 Adc53352 Novel hum
100 127 69.8 182 7 ADC58875 Adc58875 Novel hum

ALIGNMENTS

RESULT 1
ID AAY91393 standard; protein; 182 AA.
XX AC AAY91393;
XX XX
DT 29-JUN-2000 (first entry)
XX XX
DE Human secreted protein sequence encoded by gene 48 SEQ ID NO:114.
XX XX
KW Human; secreted protein; diagnosis; neuroprotective; neurotropic;
KW neuroleptic; antianemic; cerebroprotective; immunomodulatory;
KW anti-microbial; cardiant; cytosolic; antinflammatory; haemostatic;
KW anticonvulsant; vasotropic; vaccine; gene therapy; anti-sense therapy;
KW neural; reproductive; immune disorder; immunodeficiency; infection;
KW lymphoma; demyelinating disease; autoimmunity; cancer; inflammation;
KW aneurysm; haemorrhage; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; Tourette syndrome; multiple sclerosis; meningitis;
KW ischaemia; mania; dementia; obsessive compulsive disorder;
KW viral prophylaxis; developmental disorder; sexually-linked disorder;
KW cardiovascular disorder; food additive; preservative.
XX OS Homo sapiens.
XX WO200011014-A1.
XX PD 02-MAR-2000.
XX XX
XX 24-AUG-1999; 99WO-US019330.
XX PF
XX 25-AUG-1998; 98US-0097917P.
XX PR 31-AUG-1998; 98US-0098634P.
XX XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX XX
XX Moore PA, Ruben SM, Clsen HS, Shi Y, Rosen CA, Florence KA;
PI Scpett DR, Lafleur DW, Endress GA, Ebner R, Komatsoulis G, Duan RD;
XX N-PSDB; AAA26328.
XX WPI; 2000-224656/19.
XX DR
XX Novel secreted proteins and corresponding DNA molecules that can be used
XX to prevent, treat and diagnose disease in humans, for example,
XX Alzheimer's, cancer, and immune disorders.
XX
XX Claim 11; Page 380-381; 416pp; English.
XX
XX The polynucleotide sequences given in AAA26281 to AAA26336 encode the
XX human secreted proteins given in AAY91346 to AAY91449. The human secreted
XX proteins can have activities based on the tissues and cells they are
XX expressed in. Examples of the activities are: neuroprotective; neurotropic;
XX neuroleptic; antianemic; cerebroprotective; immunomodulatory; anti-
XX microbial; cardiant; cytosolic; antinflammatory; haemostatic;
XX anticonvulsant; and vasotropic. The polynucleotides and proteins may be
XX used to prevent, treat or ameliorate a medical condition, e.g. by protein
XX or gene therapy. Conditions treatable by the proteins of the invention
XX include neural, reproductive, or immune disorders, especially
XX immunodeficiency, infection, lymphoma, demyelinating diseases, auto-
XX immunities, cancer, general microbial infection, inflammation, aneurysms
XX and haemorrhages. Specific examples include: Alzheimer's disease;
XX Parkinson's; Huntington's; Tourette syndrome; multiple sclerosis;
XX meningitis; ischaemia; prostate cancer; mania; dementia; obsessive
XX compulsive disorder and viral prophylaxis. The polynucleotides and
XX proteins can also be used in the detection of disorders associated with
XX the function of the protein, for example, the detection of developmental
XX disorders, sexually-linked disorders, or disorders of the cardiovascular

CC system. They may also be used as food additives or preservatives.
CC AAA26272 to AAA26280 and AAY91345 are sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 182 AA;
Query Match 100.0%; Score 182; DB 3; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.2e-160;
Matches 182; Conservativity 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLLALLVWSALSCSFLPASSLSLVQVTSYNGRFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLLALLVWSALSCSFLPASSLSLVQVTSYNGRFLGLDKC 60
QY 61 NACIGTSICKKFKERIRSDNWLASHLGLPPDLSLAYPANYSDSKIWRFVIFRLVSKY 120
DB 61 NACIGTSICKKFKERIRSDNWLASHLGLPPDLSLAYPANYSDSKIWRFVIFRLVSKY 120
QY 121 ONEISDRKICASASAPKTCISIERVLRKTERFQWLQAKRLTPDLVQDCHOGRELKELCM 180
DB 121 ONEISDRKICASASAPKTCISIERVLRKTERFQWLQAKRLTPDLVQDCHOGRELKELCM 180
QY 181 LR 182
DB 181 LR 182
RESULT 2
AAB95695
ID AAB95695 standard; protein; 182 AA.
XX AC AAB95695;
XX XX
XX 26-JUN-2001 (first entry)
XX DT
XX Human protein sequence SEQ ID NO:18516.
XX DE
XX Human; primer; detection; diagnosis; antisense therapy; gene therapy.
XX KW Homo sapiens.
XX OS
XX EP1074617-A2.
XX PN
XX 07-FEB-2001.
XX PD
XX 28-JUL-2000; 2000EP-00116126.
XX PF
XX 29-JUL-1999; 99JP-00248036.
XX PR 27-AUG-1999; 99JP-00300253.
XX PR 11-JAN-2000; 2000JP-00118776.
XX PR 02-MAY-2000; 2000JP-00183767.
XX PR 09-JUN-2000; 2000JP-00241899.
XX XX
XX (HELI-) HELIX RES INST.
XX PA
XX Ora T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX WPI; 2001-318749/34.
XX
XX Primer sets for synthesizing polynucleotides, particularly the 5602 full-
XX length cDNAs defined in the specification, and for the detection and/or
XX diagnosis of the abnormality of the proteins encoded by the full-length
XX cDNAs.
XX
XX Claim 8; SEQ ID NO 18516; 2537pp + Sequence Listing; English.
XX
XX The present invention describes primer sets for synthesising 5602 full-
XX length cDNAs defined in the specification. Where a primer set comprises:
XX (a) an oligo-dr primer and an oligonucleotide complementary to the
XX complementary strand of a polynucleotide which comprises one of the 5602
XX nucleotide sequences defined in the specification, where the
XX oligonucleotide comprises at least 15 nucleotides; or (b) a combination

CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence and 3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAH92446 to AAH95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 182; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.2e-160;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAALRPGWLALLLWVSALSCSFSLPASSJSSLYPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPOLGPEAALRPGWLALLLWVSALSCSFSLPASSJSSLYPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWPRVEIFRLVSKY 120

QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQOQRELKFLCM 180
Db 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQOQRELKFLCM 180

QY 181 LR 182
Db 181 LR 182

RESULT 3
ABU03563
ID ABU03563 standard; protein; 182 AA.

AC ABU03563;
DT 21-JAN-2003 (first entry)
DE Angiogenesis-associated human protein sequence #108.
KW Human; angiogenesis-associated transcript; angiogenesis;
KW angiogenesis-associated disease; cancer; cytostatic.
OS Homo sapiens.

PN WO200279492-A2.
PD 10-OCT-2002.
PF 14-FEB-2002; 2002WO-US004915.
PR 14-FEB-2001; 2001US-00784356.
PR 22-FEB-2001; 2001US-00791390.
PR 19-APR-2001; 2001US-0285475P.
PR 03-AUG-2001; 2001US-0310025P.
PR 13-NOV-2001; 2001US-0350666P.
PR 29-NOV-2001; 2001US-0334244P.

XX (EOSB-) EOS BIOTECHNOLOGY INC.
XX Murray R, Glynn R, Watson SR, Aziz M;
XX WPI; 2003-040681/03.
DR

DR N-PSDB; ABX08847.

XX Detecting angiogenesis-associated transcript in a cell for diagnosing and
PT treating cancer by contacting a sample with a polynucleotide that
PT exhibits changes in expression level as a function of time in tissue
PT undergoing angiogenesis.

XX Example 2; Page 282; 291pp; English.

PS The present invention relates to methods and compositions for detecting
XX an angiogenesis-associated transcript in a cell in a patient. The method
CC involves contacting a biological sample from the patient with a
CC polynucleotide that selectively hybridises to a sequence at least 80%
CC identical to any of the angiogenesis-associated human polynucleotide
CC sequences given in the specification. These angiogenesis-associated
CC polynucleotide sequences comprise genes that exhibit changes in
CC expression levels as a function of time in tissue undergoing
CC angiogenesis. The method and the polynucleotide sequences of the
CC invention are useful for diagnosing and treating angiogenesis and
CC angiogenesis-associated diseases e.g. cancer. The polynucleotide
CC sequences are also useful in the gene therapy of such disorders. The
CC angiogenesis-associated proteins encoded by the polynucleotide sequences
CC are useful as a vaccine for therapeutic and prophylactic immunisation.
CC ABU03456-ABU03569 represent angiogenesis-associated protein sequences
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 182; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.2e-160;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAALRPGWLALLLWVSALSCSFSLPASSJSSLYPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPOLGPEAALRPGWLALLLWVSALSCSFSLPASSJSSLYPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWPRVEIFRLVSKY 120

QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQOQRELKFLCM 180
Db 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQOQRELKFLCM 180

QY 181 LR 182
Db 181 LR 182

RESULT 4
ABR47459
ID ABR47459 standard; protein; 182 AA.

AC ABR47459;
DT 12-JUN-2003 (first entry)
DE Breast cancer associated protein sequence SEQ ID NO:150.
KW Human; breast cancer; cytostatic; gene therapy.
OS Homo sapiens.

XX WO2003004989-A2.
XX 16-JAN-2003.
XX 21-JUN-2002; 2002WO-US019669.

XX 21-JUN-2001; 2001US-0299887P.
XX 27-JUN-2001; 2001US-0301572P.
XX 18-JUL-2001; 2001US-0306501P.
XX 25-SEP-2001; 2001US-0325002P.
XX 05-MAR-2002; 2002US-0362585P.
PR

PR 14-MAY-2002; 2002US-0380391P.
 XX (MILL-) MILLENIUM PHARM INC.
 PA Lillie J, Ganavarapu M, Glatt K, Hoersh S, Kamatkar S;
 PI Mertens M, Monahan JE, Myer V, Wang Y, Xu Y, Zhao X, Meyers RE;
 PI Bast RC, Hortobagyi GN, Puzsai L, Meric F, Sahin A, Mills GB;
 XX WPI; 2003-210381/20.
 DR N-PSDB; ACC50151.
 XX
 PT Breast cancer diagnosis or treatment by comparing the level of expression
 PT of a marker in a patient sample with that in the control non-breast
 PT cancer sample.
 XX
 PS Claim 1; SEQ ID NO 150; 128pp; English.
 XX
 CC The present invention describes a method for assessing whether a patient
 CC is afflicted with breast cancer. The method comprises comparing the level
 CC of expression of a marker (gene/polypeptide see ACC50076 to ACC50334 and
 CC ABR47386 to ABR47632) in a patient sample and the normal level of
 CC expression of the marker in a control non-breast cancer sample, where a
 CC significant increase in the level of expression of the marker in the
 CC patient sample and the normal level is an indication that the patient is
 CC afflicted with breast cancer. The breast cancer associated sequences from
 CC the present invention have cytostatic activities and can be used in gene
 CC therapy. The method is useful for diagnosing and treating breast cancer.
 CC X.B. The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 182 AA;
 Query Match 100.0%; Score 182; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. NO. 6.2e-160;
 Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MEPQLGPEAAALRPGWLALLWVSLSCSFSLPSSLSLVQVRTSYNFGRTFLGLDKC 60
 DB 1 MEPQLGPEAAALRPGWLALLWVSLSCSFSLPSSLSLVQVRTSYNFGRTFLGLDKC 60
 QY 61 NACIGTSICKKFFKEIRSDNWLASHGLPDDSLSYNPANYSDSKIMRPVFIPLVSKY 120
 DB 61 NACIGTSICKKFFKEIRSDNWLASHGLPDDSLSYNPANYSDSKIMRPVFIPLVSKY 120
 QY 121 QNEISDRKICASAPKTCISIRVLKTERFQKWLQAKRLTDLVDQCHQGQREKFLCM 180
 DB 121 QNEISDRKICASAPKTCISIRVLKTERFQKWLQAKRLTDLVDQCHQGQREKFLCM 180
 QY 181 LR 182
 DB 181 LR 182
 RESULT 5
 AAY91447
 ID AAY91447 standard; protein; 209 AA.
 AC AAY91447;
 XX
 DT 29-JUN-2000 (first entry)
 XX
 DE Human secreted protein sequence encoded by gene 48 SEQ ID NO:168.
 XX
 KW Human; secreted protein; diagnosis; neuroprotective; neurotropic;
 KW neuroleptic; antianemic; cerebroprotective; immunomodulatory;
 KW anti-microbial; cardiac; cytostatic; antiinflammatory; haemostatic;
 KW anticonvulsant; vasotrophic; vaccine; gene therapy; anti-sense therapy;
 KW neural; reproductive; immune disorder; immunodeficiency; infection;
 KW lymphoma; demyelinating disease; autoimmunity; cancer; inflammation;
 KW aneurysm; haemorrhage; Alzheimer's disease; Parkinson's disease;
 KW Huntington's disease; Tourette syndrome; multiple sclerosis; meningitis;
 KW ischaemia; mania; dementia; obsessive compulsive disorder;

KW viral prophylaxis; developmental disorder; sexually-linked disorder;
 KW cardiovascular disorder; food additive; preservative.
 XX Homo sapiens.
 OS
 XX WO200011014-A1.
 PN
 XX 02-MAR-2000.
 PD
 XX 24-AUG-1999; 99WO-US019330.
 XX
 XX 25-AUG-1998; 98US-0097917P.
 PR 31-AUG-1998; 98US-0098634P.
 PR
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA
 XX Moore PA, Ruben SM, Olsen HS, Shi Y, Rosen CA, Florence KA;
 PI Soppet DR, Lafleur DM, Endress GA, Ebner R, Komatsoulis G, Duan RD;
 DR WPI; 2000-224656/19.
 XX
 PT Novel secreted proteins and corresponding DNA molecules that can be used
 PT to prevent, treat and diagnose disease in humans, for example,
 PT Alzheimer's, cancer, and immune disorders.
 XX
 PS Disclosure; Page 413-414; 416pp; English.
 XX
 CC The polynucleotide sequences given in AAA26281 to AAA26336 encode the
 CC human secreted proteins given in AAY91346 to AAY91449. The human secreted
 CC proteins can have activities based on the tissues and cells they are
 CC expressed in. Examples of the activities are: neuroprotective; neurotropic;
 CC neuroleptic; antianemic; cerebroprotective; immunomodulatory; anti-
 CC microbial; cardiac; cytostatic; antiinflammatory; haemostatic;
 CC anticonvulsant; and vasotrophic. The polynucleotides and proteins may be
 CC used to prevent, treat or ameliorate a medical condition, e.g. by protein
 CC or gene therapy. Conditions treatable by the proteins of the invention
 CC include neural, reproductive, or immune disorders, especially
 CC immunodeficiency, infection, lymphoma, demyelinating diseases, auto-
 CC immunities, cancer, general microbial infection, inflammation, aneurysms
 CC and haemorrhages. Specific examples include: Alzheimer's disease;
 CC Parkinson's; Huntington's; Tourette syndrome; multiple sclerosis;
 CC meningitis; ischaemia; prostate cancer; mania; dementia; obsessive;
 CC compulsive disorder and viral prophylaxis. The polynucleotides and
 CC proteins can also be used in the detection of disorders associated with
 CC the function of the protein, for example, the detection of developmental
 CC disorders, sexually-linked disorders, or disorders of the cardiovascular
 CC system. They may also be used as food additives or preservatives.
 CC AAA26272 to AAA26280 and AAY91345 are sequences used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 209 AA;

Query Match 100.0%; Score 182; DB 3; Length 209;
 Best Local Similarity 100.0%; Pred. NO. 6.9e-160;
 Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MEPQLGPEAAALRPGWLALLWVSLSCSFSLPSSLSLVQVRTSYNFGRTFLGLDKC 60
 DB 28 MEPQLGPEAAALRPGWLALLWVSLSCSFSLPSSLSLVQVRTSYNFGRTFLGLDKC 87
 QY 61 NACIGTSICKKFFKEIRSDNWLASHGLPDDSLSYNPANYSDSKIMRPVFIPLVSKY 120
 DB 88 NACIGTSICKKFFKEIRSDNWLASHGLPDDSLSYNPANYSDSKIMRPVFIPLVSKY 147
 QY 121 QNEISDRKICASAPKTCISIRVLKTERFQKWLQAKRLTDLVDQCHQGQREKFLCM 180
 DB 148 QNEISDRKICASAPKTCISIRVLKTERFQKWLQAKRLTDLVDQCHQGQREKFLCM 207
 QY 181 LR 182
 DB 208 LR 209

RESULT 6
AAU12257
ID AAU12257 standard; protein; 182 AA.
XX
XX AAU12257;
XX
XX
DT 24-OCT-2001 (first entry)
XX
DE Human PRO3743 polypeptide sequence.
XX
XX Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast;
KW prostatic; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage;
KW ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte;
KW A-peptide; factor VIIA; gene therapy.
XX
XX Homo sapiens.
XX
XX WO20010466-A2.
XX
XX
PD 07-JUN-2001.
XX
XX
XX 01-DEC-2000; 2000WO-US032678.
XX
XX
XX 01-DEC-1999; 99WO-US028301.
XX 01-DEC-1999; 99WO-US028634.
XX 02-DEC-1999; 99WO-US028551.
XX 02-DEC-1999; 99WO-US028564.
XX 02-DEC-1999; 99WO-US028565.
XX 09-DEC-1999; 99US-0170262P.
XX 16-DEC-1999; 99WO-US030095.
XX 20-DEC-1999; 99WO-US030311.
XX 20-DEC-1999; 99WO-US030999.
XX 30-DEC-1999; 99WO-US031243.
XX 30-DEC-1999; 99WO-US031274.
XX 05-JAN-2000; 2000WO-US000219.
XX 06-JAN-2000; 2000WO-US000277.
XX 06-JAN-2000; 2000WO-US000376.
XX 11-FEB-2000; 2000WO-US003565.
XX 18-FEB-2000; 2000WO-US0004341.
XX 18-FEB-2000; 2000WO-US0004342.
XX 22-FEB-2000; 2000WO-US0004414.
XX 24-FEB-2000; 2000WO-US0004914.
XX 24-FEB-2000; 2000WO-US005004.
XX 01-MAR-2000; 2000WO-US005601.
XX 02-MAR-2000; 2000WO-US005841.
XX 03-MAR-2000; 2000US-0187232P.
XX 10-MAR-2000; 2000WO-US006319.
XX 15-MAR-2000; 2000WO-US006884.
XX 20-MAR-2000; 2000WO-US007377.
XX 21-MAR-2000; 2000WO-US007532.
XX 30-MAR-2000; 2000WO-US008439.
XX 17-MAY-2000; 2000WO-US013705.
XX 22-MAY-2000; 2000WO-US014042.
XX 30-MAY-2000; 2000WO-US014941.
XX 02-JUN-2000; 2000WO-US015264.
XX 08-JUN-2000; 2000US-0209832P.
XX 28-JUL-2000; 2000WO-US020710.
XX 11-AUG-2000; 2000WO-US022031.
XX 23-AUG-2000; 2000WO-US023522.
XX 24-AUG-2000; 2000WO-US023328.
XX 08-NOV-2000; 2000WO-US030952.
XX 10-NOV-2000; 2000WO-US030873.
XX
XX (GETH) GENENTECH INC.
XX
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao M;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2001-408281/43.
XX N-PSDB; AAS21329.
XX
XX Isolated , secretory and transmembrane PRO polypeptide used to detect

PT other PRO polypeptides, link bioactive molecules to cells expressing PRO
PT polypeptides, and detect the presence of mammalian tumors e.g. lung,
XX breast, prostate, cervical.
XX
XX Claim 12; Fig 172; 813pp; English.
XX
XX AAU12172-AAU12446 represent novel human secretory and transmembrane PRO
XX polypeptides. The PRO polypeptides are useful to detect other PRO
XX polypeptides, to link bioactive molecules to cells expressing PRO
XX polypeptides, to modulate biological activities of cells expressing PRO
XX polypeptides, and to detect the presence of mammalian lung, colon,
XX breast, prostate, rectal, cervical or liver tumours by comparing PRO
XX polypeptide expression in a cell sample to that in a control sample. Some
XX of the 2/5 sequences are also useful to stimulate the release of tumour
XX necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or
XX differentiation of chondrocytes, the proliferation or gene expression in
XX pericyte cells, the release of proteoglycans from cartilage, the
XX proliferation of inner ear utricular supporting cells or of T-
XX lymphocytes, the release of a cytokine from peripheral blood monocytes
XX (PBMCs), or the proliferation of endothelial cells. Some of the PRO
XX polypeptides may modulate glucose or free fatty acid uptake by skeletal
XX muscle cells or by adipocytes; or inhibit binding of A-peptide to factor
XX VIIA. The PRO polypeptides can be used in assays to identify molecules
XX involved in binding interactions. The polynucleotides encoding PRO
XX polypeptides can be used to generate probes, antisense RNA/DNA,
XX transgenic or knock out animals and can be used in gene therapy
XX
XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MEPQIGPEAAALRPGWLLALVLSALSCFSLPSSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQIGPEAAALRPGWLLALVLSALSCFSLPSSLSLVPQVRTSYNFGRTFLGLDKC 60
Qy 61 NACIGTICKKPFKEIRSDNWLASHLGLPDPDLLSYPPANYSDDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTICKKPFKEIRSDNWLASHLGLPDPDLLSYPPANYSDDSKIWPRVEIFRLVSKY 120
Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 7
AAB48066
ID AAB48066 standard; protein; 182 AA.
XX
XX AAB48066;
XX
XX 19-MAR-2001 (first entry)
XX
XX Human extracellular signaling molecule (EXCS) (ID 5090841CD1).
XX
XX Extracellular signaling molecule; EXCS; anti-inflammatory; human;
XX immunosuppressive; cytostatic; neuroprotective; gastrointestinal;
XX virucide; antibacterial; anti-HIV; human immunodeficiency virus;
XX antinfertility; cerebroprotective; nootropic; antitumor; antifungal;
XX anticonvulsant; tranquilizer; neuroleptic; vasotropic; gynecological;
XX keratolytic; protozoacide; gene therapy.
XX
XX Homo sapiens.
XX
XX WO200070049-A2.
XX
XX 23-NOV-2000.
XX
XX 19-MAY-2000; 2000WO-US013975.
XX 19-MAY-1999; 99US-0134949P.
XX 15-JUL-1999; 99US-0144270P.

```
PR 30-JUL-1999; 99US-0146700P.
PR 04-OCT-1999; 99US-0157508P.
XX
XX PA {INCY-} INCYTE GENOMICS INC.
XX PI Tang YT, Yue H, Lal P, Burford N, Bandman O, Baughn MR;
XX PI Azimzai Y, Lu DAM, Patterson C;
XX
XX WPI; 2001-025021/03.
XX N-PSDB; AAC84302.
XX
XX New human extracellular signaling nucleic acids and polypeptides useful
PT for diagnosing, treating and preventing infections and gastrointestinal,
PT neurological, reproductive, and autoimmune/inflammatory disorders.
XX
XX Claim 1; Page 88-89; 114pp; English.
XX
XX The invention provides human extracellular signaling molecules (EXCS) and
CC polynucleotides which identify and encode EXCS. EXCS can be expressed by
CC standard recombinant methodology. The amino acid and nucleic acid
CC sequences of EXCS are useful for diagnosing, treating and preventing
CC infections and gastrointestinal (peptic ulcer, dysphagia, pancreatitis),
CC neurological (e.g. epilepsy, ischemic cerebrovascular disease, stroke),
CC reproductive (infertility, ovulatory defects, endometriosis), autoimmune
CC /inflammatory (actinic keratosis, acquired immunodeficiency syndrome
CC (AIDS), Addison's disease), and cell proliferative disorders including
CC cancers (of the breast, adrenal gland, bone). They may also be used to
CC treat fatal familial insomnia, nutritional and metabolic diseases of the
CC nervous system, myopathies, mental disorders (anxiety, schizophrenia,
CC mood), as well as infections caused by parasites (malaria, leishmania,
CC trypanosoma), viral (adenovirus, coronavirus, flavivirus), bacterial
CC (e.g. pneumococcus, streptococcus, bacillus), and fungal (aspergillus,
CC blastomycetes, dermatophytes) agents. The nucleic acids, polypeptides,
CC antagonists, agonists, pharmaceutical compositions, and antibodies may
CC also be used for treating or preventing disorders associated with
CC increased or decreased expression or activity of EXCS. EXCS
CC polynucleotides may also be used to detect and quantify gene expression
CC in biopsied tissues in which expression of EXCS may be correlated with
CC the disease, to determine presence or excess expression of EXCS, to
CC monitor regulation of EXCS levels during therapeutic intervention, to
CC detect the presence of associated disorders, as targets in microarray, to
CC generate hybridization probes, and to detect differences in gene
CC sequences among normal, carrier or affected individuals. Antibodies may
CC also be used in diagnosing disorders, in monitoring patients being
CC treated with EXCS agonists, antagonists or inhibitors. Sequences ABA848057
CC -B48082 represent the EXCS of the invention
XX
XX SQ Sequence 182 AA;
Query Match 69.8%; Score 127; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 46-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MBPQLGPEAAALRPGWALLLLWVSALSCFSLPASSLSLIPQVRYTSYNGRFTFLGDKC 60
Db 1 MBPQLGPEAAALRPGWALLLLWVSALSCFSLPASSLSLIPQVRYTSYNGRFTFLGDKC 60
QY 61 NACIGTSICKKFKKIRSDNMLASHGLPPDLSLSPYANYSDDSKIRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKIRSDNMLASHGLPPDLSLSPYANYSDDSKIRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 8
ABO17701
ID ABO17701 standard; protein; 182 AA.
XX
XX ABO17701;
AC
XX
XX 26-AUG-2003 (first entry)
DT
```

```
XX DE Novel human secreted and transmembrane protein PRO3743.
XX
XX Human; secreted and transmembrane protein; PRO; antiinflammatory;
KW antiatherosclerotic; cardiact; anti-infectivity; anti-HIV; cytostatic;
KW antiadipetic; gene therapy; tumour necrosis factor (TNF)-alpha release;
KW TNF-alpha release; cell proliferation; cell differentiation;
KW gene expression modulator; proteoglycan release; cytokine release;
KW tumour; inflammatory disease; organ failure; atherosclerosis;
KW cardiac injury; infertility; birth defect; premature aging; AIDS;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor;
KW bioreactor; tissue typing.
XX
XX Homo sapiens.
XX
XX US2003032156-A1.
XX
XX 13-FEB-2003.
XX
XX 06-MAY-2002; 2002US-00140474.
XX
XX 31-MAR-1997; 97WO-US005230.
XX 12-JUN-1998; 98WO-US012456.
XX 14-JUL-1998; 98WO-US014552.
XX 28-AUG-1998; 98WO-US017888.
XX 10-SEP-1998; 98WO-US018824.
XX 14-SEP-1998; 98WO-US019093.
XX 14-SEP-1998; 98WO-US019094.
XX 16-SEP-1998; 98WO-US019177.
XX 17-SEP-1998; 98WO-US019330.
XX 07-OCT-1998; 98WO-US019437.
XX 23-OCT-1998; 98WO-US021141.
XX 23-OCT-1998; 98WO-US022991.
XX 23-OCT-1998; 98WO-US022992.
XX 20-NOV-1998; 98WO-US024855.
XX 01-DEC-1998; 98WO-US025108.
XX 05-JAN-1999; 99WO-US000106.
XX 08-MAR-1999; 99WO-US005028.
XX 10-MAR-1999; 99WO-US005190.
XX 20-APR-1999; 99WO-US008615.
XX 14-MAY-1999; 99WO-US010733.
XX 02-JUN-1999; 99WO-US012252.
XX 01-SEP-1999; 99WO-US020111.
XX 08-SEP-1999; 99WO-US020594.
XX 13-SEP-1999; 99WO-US020944.
XX 15-SEP-1999; 99WO-US021090.
XX 15-SEP-1999; 99WO-US021547.
XX 05-OCT-1999; 99WO-US023089.
XX 29-NOV-1999; 99WO-US028214.
XX 30-NOV-1999; 99WO-US028313.
XX 30-NOV-1999; 99WO-US028409.
XX 01-DEC-1999; 99WO-US028301.
XX 01-DEC-1999; 99WO-US028634.
XX 02-DEC-1999; 99WO-US028551.
XX 02-DEC-1999; 99WO-US028564.
XX 02-DEC-1999; 99WO-US028565.
XX 16-DEC-1999; 99WO-US030095.
XX 20-DEC-1999; 99WO-US030911.
XX 22-DEC-1999; 99WO-US030999.
XX 22-DEC-1999; 99WO-US030720.
XX 30-DEC-1999; 99WO-US031243.
XX 30-DEC-1999; 99WO-US031274.
XX 05-JAN-2000; 2000WO-US000219.
XX 06-JAN-2000; 2000WO-US000277.
XX 06-JAN-2000; 2000WO-US000376.
XX 11-FEB-2000; 2000WO-US003565.
XX 18-FEB-2000; 2000WO-US004341.
XX 18-FEB-2000; 2000WO-US004342.
XX 22-FEB-2000; 2000WO-US004414.
XX 24-FEB-2000; 2000WO-US004914.
XX 24-FEB-2000; 2000WO-US005004.
XX 01-MAR-2000; 2000WO-US005601.
```

PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAR-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX

DR WPI: 2003-341980/32.
 DR N-FSDB; ACD23938.

XX New secreted and transmembrane PRO nucleic acids, for treating
 PT inflammation, organ failure, atherosclerosis, cardiac injury,
 PT infertility, birth defects, premature aging, acquired immunodeficiency
 PT syndrome (AIDS), or cancer.

PS Claim 12; Fig 172; 660pp; English.

XX The invention describes an isolated nucleic acid (I) comprising, or which
 CC has 80 % sequence identity to, or the full-length coding sequence of, one
 CC of 275 nucleotide sequences, and which encodes a corresponding
 CC polypeptide selected from 275 amino acid sequences, where all sequences
 CC are given in the specification. The polypeptide encoded by (I) is used to
 CC detect PRO polypeptides, link a bioactive molecule to a cell expressing a
 CC PRO polypeptide, modulate a biological activity of a cell, stimulate the
 CC release of tumour necrosis factor (TNF)-alpha from human blood, modulate

CC the uptake of glucose or free fatty acid by cells, stimulate or inhibit
 CC the proliferation or differentiation of cells or gene expression,
 CC stimulate the release of proteoglycans, stimulate the release of cytokine
 CC from peripheral blood mononuclear cells, inhibit the binding of A-peptide
 CC to factor VIIA, or detect the presence of tumour in a mammal. The nucleic
 CC acid and polypeptide encoded by it, are useful for treating inflammatory
 CC diseases, organ failure, atherosclerosis, cardiac injury, infertility,
 CC birth defects, premature aging, acquired immunodeficiency syndrome
 CC (AIDS), cancer, or diabetic complications. The nucleic acid is useful as
 CC hybridisation probes, in chromosome and gene mapping, and in generating
 CC antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,
 CC diagnostics, biosensors or bioreactors. Both are useful in tissue typing.
 CC This is the amino acid sequence of a novel human secreted and
 CC transmembrane PRO polypeptide
 XX
 XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MEPQLGPEAAALRPGWLALLLWYSALSCSFSLPASSLSLVPOVRTSYNPGRTFLGLDKC 60
 Db |||||
 QY 1 MEPQLGPEAAALRPGWLALLLWYSALSCSFSLPASSLSLVPOVRTSYNPGRTFLGLDKC 60
 Db |||||
 QY 61 NACIGTSICKKPKKEIRSDNWLASHLGLPPDLSLSPANYSDSKIMRPVEIFRLVSKY 120
 Db |||||
 QY 121 QNEISDR 127
 Db 121 QNEISDR 127

RESULT 9

ABU80955
 ID ABU80955 standard; protein; 182 AA.

XX AC ABU80955;

XX 23-JUN-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO polypeptide; secreted and transmembrane protein;
 KW anti-PRO antibody; diagnostic assay; gene expression; diabetes;
 KW bone disorder; cartilage disorder; rheumatoid arthritis; obesity;
 KW sports injury; osteoarthritis; hyper-insulinaemia; hypo-insulinaemia;
 KW hearing loss; coagulation disorder; stroke; heart attack; cardiac;
 KW antidiabetic; anorectic; vulnery; antiarthritic; osteopathic;
 KW antirheumatic; auditory; cerebroprotective; angiogenic.

XX Homo sapiens.

XX US2003004311-A1.

XX 02-JAN-2003.

XX 19-DEC-2001; 2001US-00028072.

XX 18-JUN-1997; 97US-0049911P.

XX 26-AUG-1997; 97US-0056974P.

XX 17-SEP-1997; 97US-0059113P.

XX 17-SEP-1997; 97US-0059115P.

XX 17-SEP-1997; 97US-0059117P.

XX 17-SEP-1997; 97US-0059122P.

XX 17-SEP-1997; 97US-0059184P.

XX 18-SEP-1997; 97US-0059263P.

XX 19-SEP-1997; 97US-0059352P.

XX 24-SEP-1997; 97US-0059888P.

XX 17-OCT-1997; 97US-0062250P.

XX 17-OCT-1997; 97US-0062285P.

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PR 17-OCT-1997; 97US-0062287P.
PR 17-OCT-1997; 97US-0063755P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063082P.
PR 24-OCT-1997; 97US-0063272P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063350P.
PR 28-OCT-1997; 97US-0063561P.
PR 29-OCT-1997; 97US-0063764P.
PR 29-OCT-1997; 97US-0063733P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 11-DEC-1997; 97US-0069212P.
PR 11-DEC-1997; 97US-0068278P.
PR 11-DEC-1997; 97US-0069334P.
PR 16-DEC-1997; 97US-0069694P.
PR 23-JAN-1998; 98US-0072320P.
PR 04-FEB-1998; 98US-0073612P.
PR 09-FEB-1998; 98US-0074086P.
PR 09-FEB-1998; 98US-0074092P.
PR 12-MAR-1998; 98US-0077791P.
PR 20-MAR-1998; 98US-0078910P.
PR 25-MAR-1998; 98US-0079294P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079728P.
PR 31-MAR-1998; 98US-0080165P.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUN-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019394.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022951.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 23-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 16-DEC-1999; 99WO-US028565.
PR 20-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.

PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
XX
XX
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX MPI; 2003-352836/33.
XX N-PSDB; ACA67079.
XX
XX New isolated PRO polypeptide useful for treating diabetes, rheumatoid
XX arthritis, sports injuries, obesity, hearing loss in mammals, stroke, or
XX heart attack.
XX
XX Claim 12; Fig 172; 643pp; English.
XX
XX The present invention relates to the isolation of novel human PRO
XX polypeptides, and the polynucleotide sequences encoding them. The PRO
XX polypeptides are secreted and transmembrane proteins. The PRO
XX polypeptides and polynucleotides are useful for preparing a medicament
XX useful in the treatment of diabetes, bone and/or cartilage disorders
XX (e.g. rheumatoid arthritis, sports injuries, osteoarthritis), obesity,
XX hyper- or hypo-insulinaemia, hearing loss, and coagulation disorders
XX (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic
XX assays for PRO, by detecting its expression in specific cells, tissues or
XX serum, and for affinity purification of PRO from recombinant cell culture
XX or natural sources. ABU0870-ABU01144 represent the human PRO
XX polypeptides of the invention. Note: The sequence data for this patent
XX was obtained in electronic format directly from the USPTO web site at
XX seqdata.uspto.gov/psipidentry.html
XX
XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAALRPGWLALLIWSALSCSFLPASSLSLSPANYSDSKTWRPVEIFRLSKY 60
Db 1 MEPOLGPEAALRPGWLALLIWSALSCSFLPASSLSLSPANYSDSKTWRPVEIFRLSKY 60
Qy 61 NACIGTSICKFFKBEIRSDNWLASHGLPDSLLSYLPANYSDSKTWRPVEIFRLSKY 120
Db 61 NACIGTSICKFFKBEIRSDNWLASHGLPDSLLSYLPANYSDSKTWRPVEIFRLSKY 120
Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 10
ABU06655
ID ABU06655 standard; protein; 182 AA.
XX
XX ABU06655;
XX
XX
XX 23-MAY-2003 (first entry)
XX
XX Human PRO polypeptide #86.
```

XX Human; PRO polypeptide; secreted and transmembrane protein;
KW tumour necrosis factor-alpha; TNF-alpha; blood; proliferation;
KW differentiation; chondrocyte; tumour; genetic disorder; cytosstatic.
XX
OS Homo sapiens.
XX US2003036180-A1.
XX 20-FEB-2003.
XX
XX 09-MAY-2002; 2002US-00143114.
XX 31-MAR-1997; 97WO-US005230.
XX 12-JUN-1998; 98WO-US012456.
XX 14-JUL-1998; 98WO-US014552.
XX 28-AUG-1998; 98WO-US017888.
XX 10-SEP-1998; 98WO-US018824.
XX 14-SEP-1998; 98WO-US019093.
XX 14-SEP-1998; 98WO-US019094.
XX 14-SEP-1998; 98WO-US019177.
XX 16-SEP-1998; 98WO-US019330.
XX 17-SEP-1998; 98WO-US019437.
XX 07-OCT-1998; 98WO-US021141.
XX 29-OCT-1998; 98WO-US022991.
XX 29-OCT-1998; 98WO-US022992.
XX 20-NOV-1998; 98WO-US024855.
XX 01-DEC-1998; 98WO-US025108.
XX 05-JAN-1999; 99WO-US000106.
XX 08-MAR-1999; 99WO-US0005028.
XX 10-MAR-1999; 99WO-US0005190.
XX 20-APR-1999; 99WO-US0008615.
XX 14-MAY-1999; 99WO-US010733.
XX 02-JUN-1999; 99WO-US012252.
XX 01-SEP-1999; 99WO-US020111.
XX 08-SEP-1999; 99WO-US020594.
XX 13-SEP-1999; 99WO-US020944.
XX 15-SEP-1999; 99WO-US021090.
XX 15-SEP-1999; 99WO-US021547.
XX 05-OCT-1999; 99WO-US023089.
XX 29-NOV-1999; 99WO-US028214.
XX 30-NOV-1999; 99WO-US028313.
XX 30-NOV-1999; 99WO-US028409.
XX 01-DEC-1999; 99WO-US028301.
XX 01-DEC-1999; 99WO-US028634.
XX 02-DEC-1999; 99WO-US028551.
XX 02-DEC-1999; 99WO-US028564.
XX 02-DEC-1999; 99WO-US028565.
XX 16-DEC-1999; 99WO-US030095.
XX 20-DEC-1999; 99WO-US030911.
XX 20-DEC-1999; 99WO-US030999.
XX 22-DEC-1999; 99WO-US030720.
XX 30-DEC-1999; 99WO-US031243.
XX 30-DEC-1999; 99WO-US031274.
XX 05-JAN-2000; 2000WO-US0303219.
XX 06-JAN-2000; 2000WO-US0303277.
XX 06-JAN-2000; 2000WO-US0303376.
XX 11-FEB-2000; 2000WO-US030565.
XX 18-FEB-2000; 2000WO-US030431.
XX 18-FEB-2000; 2000WO-US004342.
XX 22-FEB-2000; 2000WO-US004414.
XX 24-FEB-2000; 2000WO-US004914.
XX 24-FEB-2000; 2000WO-US005004.
XX 01-MAR-2000; 2000WO-US005601.
XX 02-MAR-2000; 2000WO-US005746.
XX 02-MAR-2000; 2000WO-US005841.
XX 10-MAR-2000; 2000WO-US006319.
XX 15-MAR-2000; 2000WO-US007377.
XX 20-MAR-2000; 2000WO-US007377.
XX 21-MAR-2000; 2000WO-US007532.
XX 30-MAR-2000; 2000WO-US008439.
XX 17-MAY-2000; 2000WO-US013705.
XX 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00756498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019492.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
XX (GETH) GENENTECH INC.
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI: 2003-332040/31.
XX N-PSDB; ACA03688.
XX
XX New secreted and transmembrane PRO nucleic acids, useful for gene
therapy, in chromosome and gene mapping, as chromosome markers, in tissue
typing, and in chromosome identification.
XX
XX Claim 12; Fig 172; 66Opp; English.
XX
XX The present invention relates to the isolation of novel human PRO
polypeptides, and the polynucleotide sequences encoding them. The PRO
polypeptides are secreted and transmembrane proteins. The PRO
polypeptides are useful for detecting other PRO polypeptides, for linking
bioactive molecules to cells expressing PRO polypeptides, and for
biological activities of cells expressing PRO polypeptides, and for
identifying agonists or antagonists. The PRO polypeptides are useful for
for stimulating the release of tumour necrosis factor (TNF)-alpha from
human blood, for stimulating the proliferation or differentiation of
chondrocytes, and detecting the presence of tumours. The polynucleotide
sequences encoding PRO polypeptides are useful as hybridisation probes,
in chromosome and gene mapping, in the generation of antisense RNA and
DNA, in the preparation of PRO polypeptides, for generating transgenic
animals or knockout animals, for the genetic analysis of individuals with
genetic disorders, and in gene therapy. ABU6570-ABU6844 represent the
human PRO polypeptides of the invention. Note: The sequence data for this
patent was obtained in electronic format directly from the USPTO web site
at seqdata.uspto.gov/psipdbEntry.html

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XX SQ Sequence 182 AA;
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPLGPEAALPGMLALLWVALSCSFSLPASSLSLLVPOVRTSYNGRTFLGLDKC 60
    |||||
Db 1 MEPLGPEAALPGMLALLWVALSCSFSLPASSLSLLVPOVRTSYNGRTFLGLDKC 60
    |||||
QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPDSLSYPANYSDDSKLWRPVEIFRLWSKY 120
    |||||
Db 61 NACIGTSICKKFKKEIRSDNWLASHLGLPDSLSYPANYSDDSKLWRPVEIFRLWSKY 120
    |||||
QY 121 QNEISDR 127
    |||||
Db 121 QNEISDR 127
    |||||

RESULT 11
ABUS9736
ID ABUS9736 standard; protein; 182 AA.
XX AC ABUS9736;
XX DT 13-MAY-2003 (first entry)
XX DE Novel secreted and transmembrane protein PRO3743.
XX Human; P&O; hypertrophy of neonatal heart; angiogenesis; wound healing;
KW cardiac insufficiency disorder; cancer; tumour; immune response;
KW adrenal cortical capillary endothelial growth; c-fos induction;
KW vascular endothelial growth factor inhibition; VEGF inhibition;
KW endothelial cell growth inhibitor; T-lymphocytes stimulation;
KW retinal neurons cell survival; rod photoreceptor cell survival;
KW retinal disorder; retinitis pigmentosa; kidney disorder;
KW mammalian kidney mesangial cell proliferation; Berger disease;
KW dermatitis; herpeticiformis; Crohn's disease; chondrocyte proliferation;
KW chondrocyte redifferentiation; sports injury; arthritis.
XX CS Homo sapiens.
XX PN US2003017563-A1.
XX PD 23-JAN-2003.
XX PF 07-MAY-2002; 2002US-0014808.
XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.

15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 01-MAR-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 28-FEB-2001; 2001US-00796498.
PR 01-MAR-2001; 2001WO-US006520.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.

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PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028672.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WL, Zhang Z;
XX WPI; 2003-148238/14.
DR N-PSDB; ABX89226.
XX
XX Two hundred and seventy five nucleic acids encoding PRO polypeptides,
PT useful for treating pericyte-associated tumors, diabetes and various bone
PT and/or cartilage disorders, e.g. arthritis.
XX
XX Claim 12; Fig 172; 659pp; English.
XX
CC The invention describes an isolated human PRO polypeptide. The PRO
CC polypeptides are useful in detecting PRO polypeptides in a sample, in
CC linking a bioactive molecule to a cell expressing a PRO polypeptide, and
CC in modulating at least one biological activity of a cell expressing a PRO
CC polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus
CC useful for treating cardiac insufficiency disorders. PRO1154 and PRO1186
CC stimulate adrenal cortical capillary endothelial growth, and PRO536,
CC PRO943, PRO828, PRO1068 or PRO535, PRO826, PRO819, PRO1126,
CC PRO1360 and PRO1387 induce c-fos in endothelial cells, and are thus
CC useful for treating conditions or disorders where angiogenesis would be
CC beneficial, e.g. wound healing and antagonist of this polypeptide are
CC useful for treating cancerous tumors. PRO812 inhibits vascular
CC endothelial growth factor (VEGF) stimulated proliferation of endothelial
CC cells and is thus useful for inhibiting endothelial cell growth in
CC mammals which would be beneficial in inhibiting tumour growth. PRO826,
CC PRO1068, PRO1184, PRO1346 and PRO1375 stimulate proliferation of
CC stimulated T-lymphocytes and are therapeutically useful for enhancing
CC immune response. PRO828, PRO826, PRO1068 or PRO1132 enhance survival of
CC retinal neurons cells (PRO1132 is also enhances survival/proliferation of
CC rod photoreceptor cells) and therefore are useful for treating retinal
CC disorders of injuries, e.g. retinitis pigmentosa, AMD. PRO819, PRO813
CC and PRO1066 induce proliferation of mammalian kidney mesangial cells,
CC and therefore are useful for treating kidney disorders associated with
CC decreased mesangial cell function such as Berger disease or other
CC nephropathies associated with dermatitis, herpeticiformis or Crohn's
CC disease. PRO1310, PRO844, PRO1312, PRO1192 and PRO1387 induce the
CC proliferation and/or redifferentiation of chondrocytes in culture and are
CC thus useful for treating sports injuries, and arthritis. This is the
CC amino acid sequence of a novel human PRO protein
XX
XX Sequence 182 AA;
XX
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-129;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAARLPGMLALLWVNSALSCSFSLPASSLSLYPQVNTSNFGRTFLGLDKC 60
Db 1 MEPQLGPEAARLPGMLALLWVNSALSCSFSLPASSLSLYPQVNTSNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEEIRSDNLWASHLGLPDSLSLYNPANTSDSKIKRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNLWASHLGLPDSLSLYNPANTSDSKIKRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 12
ABO24926
ID ABO24926 standard; protein; 182 AA.
XX
AC ABO24926;
XX

DT 05-SEP-2003 (first entry)
XX
DE Human secreted/transmembrane protein (PRO) #86.
XX

KW Human; PRO; secreted protein; transmembrane protein; tumour; cytostatic;
KW gene therapy; tumour necrosis factor-alpha; TNF-alpha; blood;
KW proteoglycan; cartilage; cytokine; peripheral blood mononuclear cell;
KW PKC; glucose uptake; PFA; skeletal muscle cell; adipocyte cell;
KW chondrocyte cell proliferation; chondrocyte cell differentiation;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell; A-peptide; factor VIIA.

XX Homo sapiens.

OS

XX US2003036179-A1.

XX 20-FEB-2003.

PD

XX 10-MAY-2002; 2002US-00142431.

XX 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.

PR 14-SEP-1998; 98WO-US019177.

PR 16-SEP-1998; 98WO-US019330.

PR 17-SEP-1998; 98WO-US019437.

PR 07-OCT-1998; 98WO-US021141.

PR 29-OCT-1998; 98WO-US022991.

PR 29-OCT-1998; 98WO-US022992.

PR 20-NOV-1998; 98WO-US024855.

PR 01-DEC-1998; 98WO-US025108.

PR 05-JAN-1999; 98WO-US000106.

PR 08-MAR-1999; 99WO-US005028.

PR 10-MAR-1999; 99WO-US005190.

PR 20-APR-1999; 99WO-US008615.

PR 14-MAY-1999; 99WO-US010733.

PR 02-JUN-1999; 99WO-US012252.

PR 01-SEP-1999; 99WO-US020111.

PR 08-SEP-1999; 99WO-US020594.

PR 13-SEP-1999; 99WO-US020944.

PR 15-SEP-1999; 99WO-US021090.

PR 15-SEP-1999; 99WO-US021547.

PR 05-OCT-1999; 99WO-US023089.

PR 29-NOV-1999; 99WO-US028214.

PR 30-NOV-1999; 99WO-US028313.

PR 30-NOV-1999; 99WO-US028409.

PR 01-DEC-1999; 99WO-US028301.

PR 01-DEC-1999; 99WO-US028634.

PR 02-DEC-1999; 99WO-US028551.

PR 02-DEC-1999; 99WO-US028554.

PR 16-DEC-1999; 99WO-US030395.

PR 20-DEC-1999; 99WO-US030911.

PR 22-DEC-1999; 99WO-US030999.

PR 22-DEC-1999; 99WO-US030720.

PR 30-DEC-1999; 99WO-US031243.

PR 30-DEC-1999; 99WO-US031274.

PR 05-JAN-2000; 2000WO-US000219.

PR 06-JAN-2000; 2000WO-US000277.

PR 11-FEB-2000; 2000WO-US000376.

PR 11-FEB-2000; 2000WO-US003565.

PR 18-FEB-2000; 2000WO-US004341.

PR 22-FEB-2000; 2000WO-US004342.

PR 24-FEB-2000; 2000WO-US004914.

PR 24-FEB-2000; 2000WO-US005004.

PR 01-MAR-2000; 2000WO-US005601.

PR 02-MAR-2000; 2000WO-US005746.

PR 02-MAR-2000; 2000WO-US005841.

PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 98WO-US000106.
PR 08-MAR-1999; 98WO-US005028.
PR 10-MAR-1999; 98WO-US005190.
PR 20-APR-1999; 98WO-US008615.
PR 14-MAY-1999; 98WO-US010733.
PR 02-JUN-1999; 98WO-US012252.
PR 01-SEP-1999; 98WO-US020111.
PR 08-SEP-1999; 98WO-US020594.
PR 13-SEP-1999; 98WO-US020944.
PR 15-SEP-1999; 98WO-US021090.
PR 15-SEP-1999; 98WO-US021547.
PR 05-OCT-1999; 98WO-US023089.
PR 29-NOV-1999; 98WO-US028214.
PR 30-NOV-1999; 98WO-US028313.
PR 30-NOV-1999; 98WO-US028409.
PR 01-DEC-1999; 98WO-US028301.
PR 01-DEC-1999; 98WO-US028634.
PR 02-DEC-1999; 98WO-US028551.
PR 02-DEC-1999; 98WO-US028564.
PR 16-DEC-1999; 98WO-US028565.
PR 16-DEC-1999; 98WO-US030095.
PR 20-DEC-1999; 98WO-US030911.
PR 20-DEC-1999; 98WO-US030999.
PR 22-DEC-1999; 98WO-US030720.
PR 30-DEC-1999; 98WO-US031274.
PR 05-JAN-2000; 98WO-US031274.
PR 06-JAN-2000; 98WO-US000277.
PR 06-JAN-2000; 98WO-US000376.
PR 11-FEB-2000; 98WO-US003565.
PR 18-FEB-2000; 98WO-US004341.
PR 18-FEB-2000; 98WO-US004342.
PR 22-FEB-2000; 98WO-US004414.
PR 24-FEB-2000; 98WO-US004914.
PR 24-FEB-2000; 98WO-US005004.
PR 01-MAR-2000; 98WO-US005601.
PR 02-MAR-2000; 98WO-US005746.
PR 02-MAR-2000; 98WO-US005841.
PR 10-MAR-2000; 98WO-US006319.
PR 15-MAR-2000; 98WO-US006884.
PR 20-MAR-2000; 98WO-US007377.
PR 21-MAR-2000; 98WO-US007532.
PR 30-MAR-2000; 98WO-US008439.
PR 17-MAY-2000; 98WO-US013705.
PR 22-MAY-2000; 98WO-US014042.
PR 30-MAY-2000; 98WO-US014941.
PR 02-JUN-2000; 98WO-US015264.
PR 28-JUL-2000; 98WO-US020710.
PR 11-AUG-2000; 98WO-US020731.
PR 23-AUG-2000; 98WO-US023522.
PR 24-AUG-2000; 98WO-US023328.
PR 08-NOV-2000; 98WO-US030952.
PR 10-NOV-2000; 98WO-US030873.
PR 01-DEC-2000; 98WO-US032678.
PR 20-DEC-2000; 98WO-US0074259.
PR 20-DEC-2000; 98WO-US034956.
PR 28-FEB-2001; 98WO-US00796498.
PR 28-FEB-2001; 98WO-US006520.
PR 01-MAR-2001; 98WO-US006666.

PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 18-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001US-00866034.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001US-00872035.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001US-00886342.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001US-00887879.
PR 29-JUN-2001; 2001US-00887879.
PR 09-JUL-2001; 2001US-00908827.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
XX (GETH) GENENTECH INC.
XX
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-331925/31.
DR N-PSDB; ACA04109.
XX
XX New secreted and transmembrane nucleic acids and polypeptides, designated
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
PT cancer.
XX
PS Claim 12; Fig 172; 659pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising, or which is
CC at least 80% identical to, or the full-length coding sequence of, any of
CC the 275 nucleotide sequences, encoding the corresponding PRO polypeptide
CC (one of 275 secreted or transmembrane proteins). The nucleic acid further
CC comprises the full-length coding sequence of the DNA deposited under
CC American Type Culture Collection (ATCC) accession number in a list given
CC in the specification. Also included are vectors and host cells for
CC producing PRO proteins, PRO fusion proteins, anti-PRO antibodies, PRO
CC extracellular domains and mature sequences, methods of detecting PRO
CC proteins, methods for stimulating the release of TNF-alpha (tumour
CC necrosis factor alpha) from human blood, (and the proliferation of
CC differentiation of chondrocyte cells, the proliferation of, or gene
CC expression in pericyte cells, the release or proteoglycans from
CC cartilage, proliferation of inner ear utricular supporting cells, the
CC proliferation of T-lymphocyte cells, the release of a cytokine from
CC peripheral blood mononuclear cells (PBMC), or the proliferation of
CC endothelial cells), a method for modulating the uptake of glucose or free
CC fatty acid (FFA) by skeletal muscle cells, a method for inhibiting the
CC binding of A-peptide to factor VIIA, or the differentiation of adipocyte
CC cells, a method for detecting the presence of a tumour in a mammal and an
CC oligonucleotide probe derived from any of the nucleotide sequences cited
CC above. The nucleic acids and polypeptides are useful for treating
CC inflammatory diseases, organ failure, atherosclerosis, cardiac injury,
CC infertility, birth defects, premature aging, AIDS (acquired
CC immunodeficiency syndrome), cancer, or diabetic complications. The
CC nucleic acids are useful as hybridisation probes, in chromosome and gene
CC mapping, and in generating antisense RNA or DNA. The polypeptides are
CC useful as pharmaceuticals, diagnostics, biosensors or bioreactors. Both
CC are useful in tissue typing. The present sequence represents a PRO
CC protein of the invention
XX

```
SQ      Sequence 182 AA;
Query Match      69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 MEPLGPEAAALPGWLLALLWVALSCSFSLPASSLSLVQVRTSYNFGTEGLGDKC 60
          |||
DB      1 MEPLGPEAAALPGWLLALLWVALSCSFSLPASSLSLVQVRTSYNFGTEGLGDKC 60
          |||

QY      61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDLSYPANYSDDSKIWPRVPIFRVLVSKY 120
          |||
DB      61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDLSYPANYSDDSKIWPRVPIFRVLVSKY 120
          |||

QY      121 QNEISDR 127
          |||
DB      121 QNEISDR 127
          |||

RESULT 14
ADA45691
ID      ADA45691 standard; protein; 182 AA.
XX
AC      ADA45691;
XX
DT      20-NOV-2003 (first entry)
XX
DE      Novel human secreted and transmembrane protein PRO3743.
XX
KW      Human; secreted and transmembrane protein; PRO;
KW      Tumour necrosis factor alpha release; TNF-alpha release;
KW      glucose uptake modulator; FA uptake modulator;
KW      cell proliferation stimulator; cell differentiation stimulator;
KW      cell differentiation inhibitor; cytokine release stimulator; tumour;
KW      lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW      cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW      gene therapy; chromosome identification; chromosome marker.
XX
OS      Homo sapiens.
XX
US      US2003022328-A1.
XX
PD      30-JAN-2003.
XX
PF      16-APR-2002; 2002US-00123904.
XX
PR      31-MAR-1997; 97WO-US005230.
PR      12-JUN-1998; 98WO-US012456.
PR      14-JUL-1998; 98WO-US014552.
PR      28-AUG-1998; 98WO-US017888.
PR      10-SEP-1998; 98WO-US018824.
PR      14-SEP-1998; 98WO-US019093.
PR      14-SEP-1998; 98WO-US019094.
PR      14-SEP-1998; 98WO-US019177.
PR      16-SEP-1998; 98WO-US019330.
PR      17-SEP-1998; 98WO-US019437.
PR      07-OCT-1998; 98WO-US021141.
PR      29-OCT-1998; 98WO-US022991.
PR      29-OCT-1998; 98WO-US022992.
PR      20-NOV-1998; 98WO-US024855.
PR      01-DEC-1998; 98WO-US025108.
PR      08-JAN-1999; 99WO-US000106.
PR      05-MAR-1999; 99WO-US005028.
PR      10-MAR-1999; 99WO-US005190.
PR      20-APR-1999; 99WO-US008615.
PR      14-MAY-1999; 99WO-US010733.
PR      02-JUN-1999; 99WO-US012252.
PR      01-SEP-1999; 99WO-US020111.
PR      08-SEP-1999; 99WO-US020594.
PR      13-SEP-1999; 99WO-US020944.
PR      15-SEP-1999; 99WO-US021090.
PR      15-SEP-1999; 99WO-US021547.
PR      05-OCT-1999; 99WO-US023089.
PR      23-NOV-1999; 99WO-US028214.
PR      30-NOV-1999; 99WO-US028313.
PR      30-NOV-1999; 99WO-US028409.
PR      01-DEC-1999; 99WO-US028301.
PR      01-DEC-1999; 99WO-US028634.
PR      02-DEC-1999; 99WO-US028551.
PR      02-DEC-1999; 99WO-US028564.
PR      02-DEC-1999; 99WO-US028565.
PR      16-DEC-1999; 99WO-US030095.
PR      20-DEC-1999; 99WO-US030911.
PR      20-DEC-1999; 99WO-US030720.
PR      22-DEC-1999; 99WO-US031243.
PR      30-DEC-1999; 99WO-US031274.
PR      05-JAN-2000; 2000WO-US000219.
PR      06-JAN-2000; 2000WO-US000277.
PR      06-JAN-2000; 2000WO-US000376.
PR      11-FEB-2000; 2000WO-US003565.
PR      18-FEB-2000; 2000WO-US004341.
PR      18-FEB-2000; 2000WO-US004342.
PR      22-FEB-2000; 2000WO-US004414.
PR      24-FEB-2000; 2000WO-US004914.
PR      24-FEB-2000; 2000WO-US005004.
PR      01-MAR-2000; 2000WO-US005601.
PR      02-MAR-2000; 2000WO-US005746.
PR      02-MAR-2000; 2000WO-US005841.
PR      10-MAR-2000; 2000WO-US006319.
PR      15-MAR-2000; 2000WO-US006884.
PR      20-MAR-2000; 2000WO-US007377.
PR      21-MAR-2000; 2000WO-US007532.
PR      30-MAR-2000; 2000WO-US008439.
PR      17-MAY-2000; 2000WO-US013705.
PR      22-MAY-2000; 2000WO-US014042.
PR      30-MAY-2000; 2000WO-US014941.
PR      02-JUN-2000; 2000WO-US015264.
PR      28-JUL-2000; 2000WO-US020710.
PR      11-AUG-2000; 2000WO-US020231.
PR      23-AUG-2000; 2000WO-US023522.
PR      24-AUG-2000; 2000WO-US023528.
PR      08-NOV-2000; 2000WO-US030592.
PR      10-NOV-2000; 2000WO-US030873.
PR      01-DEC-2000; 2000WO-US032678.
PR      20-DEC-2000; 2000US-00747259.
PR      20-DEC-2000; 2000WO-US034956.
PR      28-FEB-2001; 2001US-00796498.
PR      28-FEB-2001; 2001WO-US006520.
PR      01-MAR-2001; 2001WO-US006666.
PR      09-MAR-2001; 2001US-00802706.
PR      14-MAR-2001; 2001US-00808689.
PR      22-MAR-2001; 2001US-00816744.
PR      05-APR-2001; 2001US-00828366.
PR      10-MAY-2001; 2001US-00854208.
PR      10-MAY-2001; 2001US-00854280.
PR      18-MAY-2001; 2001US-00860216.
PR      25-MAY-2001; 2001US-00866028.
PR      25-MAY-2001; 2001US-00866034.
PR      25-MAY-2001; 2001WO-US017092.
PR      01-JUN-2001; 2001US-00872035.
PR      01-JUN-2001; 2001WO-US017800.
PR      05-JUN-2001; 2001US-00874503.
PR      14-JUN-2001; 2001US-00882636.
PR      19-JUN-2001; 2001US-00886342.
PR      20-JUN-2001; 2001WO-US019692.
PR      21-JUN-2001; 2001US-00887879.
PR      22-JUN-2001; 2001WO-US020116.
PR      29-JUN-2001; 2001WO-US021066.
PR      09-JUL-2001; 2001WO-US021735.
PR      18-JUL-2001; 2001US-00908827.
PR      06-AUG-2001; 2001US-00924419.
PR      09-AUG-2001; 2001US-00927796.
PR      16-AUG-2001; 2001US-00931836.
PR      19-DEC-2001; 2001US-00028072.
XX
```

PA (GETH) GENENTECH INC.
 XX Baker KP, Beresini M, Deforge L, Desmoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WT, Zhang Z;
 XX WPI; 2003-584997/55.
 DR N-PSDB; ADA4569C.
 XX Novel secreted and transmembrane polypeptide for modulating biological
 PT activity of cell expressing the polypeptide, identifying agonists or
 PT antagonists of polypeptide, and as molecular weight markers.
 XX Claim 12; Fig 172; 659pp; English.
 XX The invention describes 305 nucleic acids encoding PRO (secreted and
 CC transmembrane) polypeptides (I). (I) is useful for stimulating the
 CC release of TNF-alpha from human blood, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating the proliferation or differentiation of chondrocyte cells,
 CC for stimulating the proliferation of or gene expression in pericyte
 CC cells, for stimulating the release of proteoglycans from cartilage, for
 CC stimulating the proliferation of inner ear utricular supporting cells,
 CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
 CC the release of a cytokine from PBMC cells, for inhibiting the binding of
 CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
 CC cells, for stimulating proliferation of endothelial cells, for detecting
 CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
 CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
 CC are useful for isolating genomic and cDNA nucleotide sequences or
 CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
 CC in assays to identify other proteins or molecules involved in binding
 CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
 CC and gene mapping, in generation of antisense RNA and DNA, in the
 CC preparation of PRO polypeptide, for generating transgenic animals or
 CC knockout animals which in turn are useful in the development and
 CC screening of therapeutically useful reagents, in gene therapy, for
 CC chromosome identification, as chromosome marker, and for generating
 CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
 CC detecting its expression in specific cells, tissues or serum, and for
 CC affinity purification of PRO from recombinant cell culture or natural
 CC sources. (I) and (II) are useful for tissue typing. This is the amino
 CC acid sequence of a novel human secreted and transmembrane PRO
 CC polypeptide.
 XX SQ Sequence 182 AA;
 Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 MEPQLGPEAAALRPGWALLWVLSALSCSFSLPASSLSLVLPQVTSYNGFTFLGLDKC 60
 Db 1 MEPQLGPEAAALRPGWALLWVLSALSCSFSLPASSLSLVLPQVTSYNGFTFLGLDKC 60
 Qy 61 NACGTSTCKFFKEIRSDNWASHLGC:PDLSLSYPANYSDSKIRPVEIFRLVSKY 120
 Db 61 NACGTSTCKFFKEIRSDNWASHLGC:PDLSLSYPANYSDSKIRPVEIFRLVSKY 120
 Qy 121 QNEISDR 127
 Db 121 QNEISDR 127
 RESULT 15
 ADA76122
 ID ADA76122 standard; protein; 182 AA.
 XX AC ADA76122;
 XX 20-NOV-2003 (first entry)
 XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
 KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
 KW cancer; adrenal; lung; colon; breast; prostate; kidney; cervix;
 KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.
 OS Homo sapiens.
 XX US2003073212-A1.
 XX 17-APR-2003.
 XX 16-APR-2002; 2002US-00123903.
 XX 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 14-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 16-DEC-1999; 99WO-US028565.
 PR 20-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 22-DEC-1999; 99WO-US030999.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.

PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US022109.
 PR 15-SEP-1999; 99WO-US022154.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 11-FEB-2000; 2000WO-US000376.
 PR 18-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005941.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006684.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.

PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX
 PA (GSTM) GENENTECH INC.
 XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX
 DR WPI; 2003-521854/49.
 DR N-PSDB; ADA18771.
 XX
 PT New PRO nucleic acid, useful for preparing a composition for treating
 PT e.g., tumors.
 XX
 PS Claim 12; Fig 172; 660pp; English.
 CC The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. lung, colon, breast,
 CC prostate, rectal, cervical and liver tumours). The polynucleotides are
 CC useful in molecular biology, including uses as hybridisation probes, in
 CC chromosome and gene mapping, in generating antisense RNA and DNA and in
 CC gene therapy. The polynucleotides may also be used in preparing PRO
 CC polypeptides by recombinant techniques and in generating either
 CC transgenic animals or knock-out animals which are useful in the
 CC development and screening of therapeutically useful reagents. The PRO
 CC polypeptides or antibodies are used in preparing a medicament for
 CC treating a condition responsive to the polypeptides or antibodies, such
 CC as tumours, for modulating the uptake of glucose or FFA by adipocyte
 CC cells, for stimulating the proliferation of or gene expression in
 CC pericyte cells, for stimulating the release of proteoglycans from
 CC cartilage, for stimulating the proliferation of inner ear utricular
 CC supporting cells, for stimulating the release of cytokines from PBMC
 CC cells, for inhibiting the binding of A-peptide to factor VIIA, for
 CC inhibiting the differentiation of adipocyte cells and for stimulating the
 CC proliferation of endothelial cells. This sequence represents a human PRO
 CC polypeptide of the invention. Note: The sequence data for this patent is
 CC also available in electronic format from USPTO at
 CC seqdata.uspto.gov/sequence.html.
 XX
 SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 MEPOLGPEAALRPGWLALLLWVSALSCSFLSPASSLSLVPPQVRTSYNFRTEFLGLDKC 60
 Db 1 MEPOLGPEAALRPGWLALLLWVSALSCSFLSPASSLSLVPPQVRTSYNFRTEFLGLDKC 60

QY 61 NACIGTSICKKFFKEIRSDNNWASHGLPDPDSLLSYPNYSDSKIMRPVIFRIVSKY 123
 Db 61 NACIGTSICKKFFKEIRSDNNWASHGLPDPDSLLSYPNYSDSKIMRPVIFRIVSKY 120
 QY 121 QNEISDR 127
 Db 121 QNEISDR 127

RESULT 17
 ADA61395
 ID ADA61395 standard; protein; 182 AA.
 XX AC ADA61395;
 XX DT 20-NOV-2003 (first entry)
 XX DE Homo sapiens.
 XX Human; secreted and transmembrane protein; PRO;
 KW Tumour necrosis factor alpha release; TNF-alpha release;
 KW glucose uptake modulator; FFA uptake modulator;
 KW cell proliferation stimulator; cell differentiation stimulator;
 KW cell differentiation inhibitor; cytokine release stimulator; tumour;
 KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
 KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
 KW gene therapy; chromosome identification; chromosome marker.
 XX OS Novel.
 OS human.
 OS secreted.
 OS and.
 OS transmembrane.
 OS protein.
 OS PRO3743.
 XX US2003049816-A1.
 XX 13-MAR-2003.
 XX 15-APR-2002; 2002US-00123262.
 XX 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 16-SEP-1998; 98WO-US019177.
 PR 17-SEP-1998; 98WO-US019330.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.

PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030993.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 05-JAN-2000; 99WO-US031274.
 PR 06-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 13-FEB-2000; 2000WO-US004341.
 PR 13-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 01-MAR-2001; 2001WO-US006520.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00806689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001US-00866034.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001US-00872035.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX (GETH) GENENTECH INC.
 PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-695892/66.
 DR N-PSDB; ADA61394.
 XX
 PT New PRO nucleic acid and encode polypeptides, are useful for
 PT manufacturing a medicament for diagnosing or treating cancer.
 XX
 PS Claim 12; Fig 172; 660pp; English.
 XX
 CC The invention describes 305 nucleic acids encoding PRO (secreted and
 CC transmembrane) polypeptides (I). (I) is useful for stimulating the
 CC release of TNF-alpha from human blood, for modulating the uptake of
 CC glucose or PFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating the proliferation or differentiation of chondrocyte cells,
 CC for stimulating the proliferation of or gene expression in pericyte
 CC cells, for stimulating the release of proteoglycans from cartilage, for
 CC stimulating the proliferation of inner ear utricular supporting cells,
 CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
 CC the release of a cytokine from PBC cells, for inhibiting the binding of
 CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
 CC cells, for stimulating proliferation of endothelial cells, for detecting
 CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
 CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
 CC are useful for isolating genomic and cDNA nucleotide sequences or
 CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
 CC in assays to identify other proteins or molecules involved in binding
 CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
 CC and gene mapping, in generation of antisense RNA and DNA, in the
 CC preparation of PRO polypeptide, for generating transgenic animals or
 CC knockout animals which in turn are useful in the development and
 CC screening of therapeutically useful reagents, in gene therapy, for
 CC chromosome identification, as chromosome marker, and for generating
 CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
 CC detecting its expression in specific cells, tissues or serum, and for
 CC affinity purification of PRO from recombinant cell culture or natural
 CC sources. (I) and (II) are useful for tissue typing. This is the amino
 CC acid sequence of a novel human secreted and transmembrane PRO
 CC polypeptide.
 XX
 QQ Sequence 182 AA;
 Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 MEPOLGPEAAALRPGWALLWVSLSCFSLPASSLSLVLPQVTSYNGRTFLGLDKC 60
 Db 1 MEPOLGPEAAALRPGWALLWVSLSCFSLPASSLSLVLPQVTSYNGRTFLGLDKC 60
 Oy 61 NACIGTSICKKPFKEIRSDNWLASHGLPPDLSLLSYDPANYSDDSKINRPVEIFRLWSKY 120
 Db 61 NACIGTSICKKPFKEIRSDNWLASHGLPPDLSLLSYDPANYSDDSKINRPVEIFRLWSKY 120
 Oy 121 QNEISDR 127
 Db 121 QNEISDR 127
 RESULT 18
 ADB19180
 ID ADB19180 standard; protein; 182 AA.
 XX
 AC ADB19180;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Novel human secreted and transmembrane protein PRO3743.
 XX
 KW Human; secreted and transmembrane protein; PRO;
 KW Tumour necrosis factor alpha release; TNF-alpha release;
 KW glucose uptake modulator; PFA uptake modulator;
 KW cell proliferation stimulator; cell differentiation stimulator;

KW cell differentiation inhibitor; cytokine releas.
 XX Homo sapiens.
 XX US2003068796-A1.
 XX 10-APR-2003.
 PD 15-APR-2002; 2002US-00123261.
 XX 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 28-AUG-1998; 98WO-US014552.
 PR 10-SEP-1998; 98WO-US017888.
 PR 14-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019310.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 98WO-US000106.
 PR 08-MAR-1999; 98WO-US005028.
 PR 10-MAR-1999; 98WO-US005190.
 PR 20-APR-1999; 98WO-US008615.
 PR 14-MAY-1999; 98WO-US010733.
 PR 02-JUN-1999; 98WO-US012252.
 PR 01-SEP-1999; 98WO-US020111.
 PR 08-SEP-1999; 98WO-US020594.
 PR 13-SEP-1999; 98WO-US020944.
 PR 15-SEP-1999; 98WO-US021090.
 PR 15-SEP-1999; 98WO-US021547.
 PR 05-OCT-1999; 98WO-US023089.
 PR 29-NOV-1999; 98WO-US028214.
 PR 30-NOV-1999; 98WO-US028313.
 PR 30-NOV-1999; 98WO-US028409.
 PR 01-DEC-1999; 98WO-US028301.
 PR 01-DEC-1999; 98WO-US028634.
 PR 02-DEC-1999; 98WO-US028551.
 PR 02-DEC-1999; 98WO-US028564.
 PR 16-DEC-1999; 98WO-US030095.
 PR 20-DEC-1999; 98WO-US030911.
 PR 20-DEC-1999; 98WO-US030999.
 PR 22-DEC-1999; 98WO-US030720.
 PR 30-DEC-1999; 98WO-US031243.
 PR 30-DEC-1999; 98WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US003376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 01-MAR-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.

PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 18-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 35-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
PA (GETH) GENENTECH INC.
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
XX Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
XX Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-695927/66.
XX N-PSDB; ADB19179.
XX Novel secreted and transmembrane PRO polypeptides useful for stimulating
XX the release of tumor necrosis factor alpha and detecting the presence of
XX a tumor in a mammal.
XX Claim 12; Fig 172; 660pp; English.
XX The invention describes 305 nucleic acids encoding PRO (secreted and
XX transmembrane) polypeptides (I). (I) is useful for stimulating the
XX release of TNF-alpha from human blood, for modulating the uptake of
XX glucose or FFA by skeletal muscle cells or adipocyte
XX Sequence :82 AA;
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. NO. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEFQGPAAALPGWLLALWLSALSCFSLPASSLSLVPQRTSYNFGRTFLGLDKC 60
DB 1 MEFQGPAAALPGWLLALWLSALSCFSLPASSLSLVPQRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPDSLLSYPNYSDSKLWRPVEIFRLVSKY 120
DB 61 NACIGTSICKFFKEIRSDNWLASHLGLPDSLLSYPNYSDSKLWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 19
ADB27721
ID ADB27721 standard; protein; 182 AA.
XX ADB27721;
XX AC ADB27721;
XX 20-NOV-2003 (first entry)
XX Human PRO polypeptide #86.
XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
XX tumor necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
XX cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
XX liver; microvascular endothelial cell; glucose; FFA;
XX skeletal muscle cell; adipocyte cell; pericyte cell;
XX inner ear utricular supporting cell; T-lymphocyte cell;
XX endothelial cell tube formation; bone disorder; cartilage disorder;
XX sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
XX rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
XX immune system cell infiltration.
XX Homo sapiens.
XX US2003082704 A1.
XX 01-MAY-2003.
XX 24-APR-2002; 2002US-00131819.
XX 09-DEC-1999; 99US-0170262P.
XX 01-DEC-2000; 2000WO-US032678.
XX 19-DEC-2001; 2001US-00028072.
XX WPI; 2003-765415/72.
XX N-PSDB; ADB27720.
XX New PRO nucleic acid, useful for preparing a composition for treating
XX e.g., tumor or for tissue typing.
XX Claim 12; Fig 172; 637pp; English.
XX The invention relates to isolated human PRO polypeptides (secreted and
XX transmembrane polypeptides) and the polynucleotides encoding them. The
XX invention also relates to an antibody which specifically binds to a PRO
XX polypeptide, a method for stimulating the release of tumor necrosis
XX factor-alpha (TNF-alpha) from human blood, a method for stimulating the
XX proliferation or differentiation of chondrocyte cells and a method for
XX detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
XX colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
XX polynucleotides are useful in molecular biology, including uses as
XX hybridisation probes, in chromosome and gene mapping, in generating
XX antisense RNA and DNA and in gene therapy. The polynucleotides may also
XX be used in preparing PRO polypeptides by recombinant techniques and in
XX generating either transgenic animals or knock-out animals which are
XX useful in the development and screening of therapeutically useful
XX reagents. The PRO polypeptides or antibodies are used in preparing a
XX medicament for treating a condition responsive to the polypeptides or
XX antibodies, such as tumours, for stimulating and inhibiting proliferation
XX of human microvascular endothelial cells, for modulating the uptake of
XX glucose or FFA by skeletal muscle cells or adipocyte cells, for
XX stimulating differentiation of adipocyte cells, for stimulating
XX proliferation of or gene expression in pericyte cells, for stimulating
XX the proliferation of inner ear utricular supporting cells or T-lymphocyte
XX cells, for inducing endothelial cell tube formation and for treating

CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQIGPEAALRPGWLLWVSLSCSFSPASSLSLVPQVTSNFGRTFLGLDKC 60
Db 1 MEPQIGPEAALRPGWLLWVSLSCSFSPASSLSLVPQVTSNFGRTFLGLDKC 60
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 20

ADA86200
ID ADA86200 standard; protein; 182 AA.

AC ADA86200;

DT 20-NOV-2003 (first entry)

DE Novel human secreted and transmembrane protein PRO3743.

XX Human; secreted and transmembrane protein; PRO;
XX Tumour necrosis factor alpha release; TNF-alpha release;
XX glucose uptake modulator; FFA uptake modulator;
XX cell proliferation stimulator; cell differentiation stimulator;
XX cell differentiation inhibitor; cytokine release stimulator; tumour;
XX lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
XX cervical tumour; liver tumour; chromosome mapping; gene mapping;
XX gene therapy; chromosome identification; chromosome marker.

OS Homo sapiens.

XX US2003082711-A1.

XX 01-MAY-2003.

XX 16-MAY-2002; 2002US-00147508.

XX 02-JUL-1998; 98US-0091519P.

XX 02-JUN-1999; 99WO-US012252.

XX 07-JUL-1999; 99US-0143048P.

XX 25-AUG-1999; 99US-00380137.

XX 30-MAR-2000; 2000WO-US008439.

XX 01-DEC-2000; 2000WO-US032678.

XX 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

XX Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

XX Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI, 2003-786914/74.

XX N-PSDB; ADA86199.

XX PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.

XX Claim 12; Fig 172; 637pp; English.

XX The invention describes 305 nucleic acids encoding PRO (secreted and
transmembrane) polypeptides (I). (I) is useful for stimulating the
release of TNF-alpha from human blood, for modulating the uptake of
glucose or FFA by skeletal muscle cells or adipocyte cells, for
stimulating the proliferation or differentiation of chondrocyte cells,
for stimulating the proliferation of or gene expression in pericyte
cells, for stimulating the release of proteoglycans from cartilage, for
stimulating the proliferation of inner ear intracellular supporting cells,
for stimulating the proliferation of T-lymphocyte cells, for stimulating
the release of a cytokine from PMC cells, for inhibiting the binding of
A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
cells, for stimulating proliferation of endothelial cells, for detecting
the presence of tumour in a mammal. The tumour is lung, colon, breast,
prostate, rectal, cervical or liver tumour. The oligonucleotide probes
are useful for isolating genomic and cDNA nucleotide sequences or
antisense probes. (I) is also useful as therapeutic agent. PRO is useful
in assays to identify other proteins or molecules involved in binding
interaction. A polynucleotide (II) encoding (I) is useful in chromosome
and gene mapping, in generation of antisense RNA and DNA, in the
preparation of PRO polypeptide, for generating transgenic animals or
knockout animals which in turn are useful in the development and
screening of therapeutically useful reagents, in gene therapy, for
chromosome identification, as chromosome marker, and for generating
probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
detecting its expression in specific cells, tissues or serum, and for
affinity purification of PRO from recombinant cell culture or natural
sources. (I) and (II) are useful for tissue typing. This is the amino
acid sequence of a novel human secreted and transmembrane PRO
polypeptide.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQIGPEAALRPGWLLWVSLSCSFSPASSLSLVPQVTSNFGRTFLGLDKC 60

Db 1 MEPQIGPEAALRPGWLLWVSLSCSFSPASSLSLVPQVTSNFGRTFLGLDKC 60

Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 21

ADB15764

ID ADB15764 standard; protein; 182 AA.

XX ADB15764;

DT 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
XX tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
XX cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
XX liver; microvascular endothelial cell; glucose; FFA;
XX skeletal muscle cell; adipocyte cell; pericyte cell;
XX inner ear intracellular supporting cell; T-lymphocyte cell;
XX endothelial cell tube formation; bone disorder; cartilage disorder;
XX sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.
 XX Homo sapiens.
 XX US2003087350-A1.
 XX 08-MAY-2003.
 XX 22-APR-2002; 2002US-00127821.
 XX 04-AUG-1998; 98US-0095301P.
 XX 02-JUN-1999; 99WO-US012252.
 XX 25-AUG-1999; 99US-00380137.
 XX 30-MAR-2000; 2000WO-US0008439.
 XX 01-DEC-2000; 2000WO-US032678.
 XX 19-DEC-2001; 2001US-00028072.
 XX (GETH) GENENTECH INC.
 XX Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 DR WPI: 2003-786941/74.
 DR N-PSDB; ADB15763.
 XX New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
 PT and for manufacturing a medicament for diagnosing or treating tumor.
 PT Claim 12; Fig 172; 637pp; English.
 XX The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a
 CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumors, for stimulating and inhibiting proliferation
 CC of human microvascular endothelial cells, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC proliferation of or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 CC from cartilage are useful for treating sports-related joint problems. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassaemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The
 CC sequence data for this patent is also available in electronic format from
 CC USPTO at seqdata.uspto.gov/sequence.html.
 XX SQ Sequence 182 AA;
 Query Match 69.0%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MEPQLGPEAAALPFGWLLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60

Db 1 MEPQLGPEAAALPFGWLLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
 QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKTIWRPVEIRLVSKY 120
 Db 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLSYPANYSDDSKTIWRPVEIRLVSKY 120
 QY 121 QNEISDR 127
 Db 121 QNEISDR 127
 RESULT 22
 ADA47550
 ID ADA47550 standard; protein; 182 AA.
 XX AC ADA47550;
 XX DT 20-NOV-2003 (first entry)
 XX Human PRO polypeptide #86.
 KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
 KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
 KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
 KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.
 XX Homo sapiens.
 XX US2003073215-A1.
 XX 17-APR-2003.
 XX 07-MAY-2002; 2002US-00140925.
 XX 31-MAR-1997; 97WO-US005230.
 XX 12-JUN-1998; 98WO-US012456.
 XX 14-JUL-1998; 98WO-US014552.
 XX 28-AUG-1998; 98WO-US017888.
 XX 10-SEP-1998; 98WO-US018824.
 XX 14-SEP-1998; 98WO-US019093.
 XX 14-SEP-1998; 98WO-US019094.
 XX 16-SEP-1998; 98WO-US019177.
 XX 17-SEP-1998; 98WO-US019330.
 XX 07-OCT-1998; 98WO-US019437.
 XX 23-OCT-1998; 98WO-US022391.
 XX 23-OCT-1998; 98WO-US022392.
 XX 23-NOV-1998; 98WO-US024855.
 XX 01-DEC-1998; 98WO-US025108.
 XX 05-JAN-1999; 99WO-US000106.
 XX 08-MAR-1999; 99WO-US005028.
 XX 10-MAR-1999; 99WO-US005190.
 XX 20-APR-1999; 99WO-US008615.
 XX 14-MAY-1999; 99WO-US010733.
 XX 02-JUN-1999; 99WO-US012252.
 XX 01-SEP-1999; 99WO-US020111.
 XX 08-SEP-1999; 99WO-US020594.
 XX 13-SEP-1999; 99WO-US020944.
 XX 15-SEP-1999; 99WO-US021090.
 XX 15-SEP-1999; 99WO-US021547.
 XX 05-OCT-1999; 99WO-US023089.
 XX 29-NOV-1999; 99WO-US028214.
 XX 30-NOV-1999; 99WO-US028313.
 XX 30-NOV-1999; 99WO-US028409.
 XX 01-DEC-1999; 99WO-US028301.
 XX 01-DEC-1999; 99WO-US028634.

PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030311.
 PR 20-DEC-1999; 99WO-US030399.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013735.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US023710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US033328.
 PR 08-NOV-2000; 2000WO-US033952.
 PR 10-NOV-2000; 2000WO-US033873.
 PR 01-DEC-2000; 2000WO-US032878.
 PR 20-DEC-2000; 2000US-00747259.
 PR 28-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

XX Baker KP, Beresini M, DeForge J, Desnoyers L, Filvaroff E, Gao W;
 XX Geiritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WL, Zhang Z;

XX WPI; 2003-644801/61.
 DR N-PSDB; ADA47549.
 XX
 PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
 PT in gene therapy, detecting the presence of tumor in a mammal, or
 PT modulating the uptake of glucose or free fatty acid by skeletal muscle
 PT cells or adipocyte cells.
 XX
 PS Claim 12; Fig 172; 659pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumor necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a
 CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 CC of human microvascular endothelial cells, for modulating the uptake of
 CC glucose or PFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC proliferation of or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 CC from cartilage are useful for treating sports-related joint problems, PRO
 CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The
 CC sequence data for this patent is also available in electronic format from
 CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWIALLLWVSALSCFSPLPASSLSLVQVTSNFGTFLGLDKC 60
 Db 1 MEPQLGPEAAALRPGWIALLLWVSALSCFSPLPASSLSLVQVTSNFGTFLGLDKC 60
 Qy 61 NACIGTSICKKFEKEIRSDNWLASHLGLPDSLSLYPANYSDDSKIMRPVEIFRLVSKY 120
 Db 61 NACIGTSICKKFEKEIRSDNWLASHLGLPDSLSLYPANYSDDSKIMRPVEIFRLVSKY 120
 Qy 121 QNEISDR 127
 Db 121 QNEISDR 127

RESULT 23

ADA67345
 ID ADA67345 standard; protein; 182 AA.

XX ADA67345;

XX 20-NOV-2003 (first entry)
 XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
 KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
 KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
 KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.
 XX
 OS Homo sapiens.
 XX
 PN US2003068795-A1.
 XX
 PD 10-APR-2003.
 XX
 PF 15-APR-2002; 2002US-00123236.
 XX
 PR 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 13-SEP-1998; 98WO-US018624.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 23-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028401.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX
 DR MPI; 2003-695926/66.
 DR N-PSDB; ADA67344.
 XX
 PT Novel isolated PRO secreted and transmembrane polypeptides useful for
 PT stimulating the release of tumor necrosis factor-alpha from human blood
 PT and detecting the presence of a tumor in a mammal.
 XX
 PS Claim 12; Fig 172; 660pp; English.
 XX
 CC The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumor necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
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CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a
 CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 CC of human microvascular endothelial cells, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC the proliferation of or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 CC from cartilage are useful for treating sports-related joint problems. PRO
 CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassaemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The
 CC sequence data for this patent is also available in electronic format from
 CC USPTO at seqdata.uspto.gov/sequence.html.
 XX
 SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAALRPGWALLWVSALSCSFSLPASSLSLLVPQVTSNFGRTFLGLDKC 60
 Db |||||
 Qy 1 MEPOLGPEAALRPGWALLWVSALSCSFSLPASSLSLLVPQVTSNFGRTFLGLDKC 60
 Db |||||

Qy 61 NACIGTSTCKFFKKEEIRSDNKLASHLGLPPDLSLPYNTSDSKIWPRVEIFELVSKY 120
 Db |||||

Qy 121 ONEISDR 127
 Db |||||

Qy 121 ONEISDR 127

RESULT 24
 ADB30352
 ID ADB30352 standard; protein; 182 AA.

XX ADB30352;
 AC
 XX
 XX
 DT 20-NOV-2003 (first entry)
 XX
 XX
 DE Human PRO polypeptide #86.
 XX
 KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
 KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
 KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
 KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.
 XX
 OS Homo sapiens.
 XX
 PN US2003068794-A1.
 XX
 PD 10-APR-2003.
 XX
 XX 15-APR-2002; 2002US-00123155.
 XX
 PF 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR

PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 29-OCT-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 98WO-US000106.
 PR 08-MAR-1999; 98WO-US005028.
 PR 10-MAR-1999; 98WO-US005190.
 PR 20-APR-1999; 98WO-US008615.
 PR 14-MAY-1999; 98WO-US010733.
 PR 02-JUN-1999; 98WO-US012252.
 PR 01-SEP-1999; 98WO-US020111.
 PR 08-SEP-1999; 98WO-US020594.
 PR 13-SEP-1999; 98WO-US020944.
 PR 15-SEP-1999; 98WO-US021090.
 PR 15-SEP-1999; 98WO-US021547.
 PR 05-OCT-1999; 98WO-US023089.
 PR 29-NOV-1999; 98WO-US028214.
 PR 30-NOV-1999; 98WO-US028313.
 PR 30-NOV-1999; 98WO-US028409.
 PR 01-DEC-1999; 98WO-US028301.
 PR 01-DEC-1999; 98WO-US028634.
 PR 02-DEC-1999; 98WO-US028551.
 PR 02-DEC-1999; 98WO-US028564.
 PR 02-DEC-1999; 98WO-US028565.
 PR 16-DEC-1999; 98WO-US030095.
 PR 20-DEC-1999; 98WO-US030911.
 PR 20-DEC-1999; 98WO-US030999.
 PR 22-DEC-1999; 98WO-US030720.
 PR 30-DEC-1999; 98WO-US031243.
 PR 30-DEC-1999; 98WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
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 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
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 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 28-FEB-2001; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 01-MAR-2001; 2001WO-US006665.
 PR 09-MAR-2001; 2001US-00802706.

14-MAR-2001; 2001US-00808689.
 22-MAR-2001; 2001US-00816744.
 05-APR-2001; 2001US-00828366.
 10-MAY-2001; 2001US-00854208.
 10-MAY-2001; 2001US-00854280.
 18-MAY-2001; 2001US-00863216.
 25-MAY-2001; 2001US-00866328.
 25-MAY-2001; 2001US-00866334.
 25-MAY-2001; 2001US-00870335.
 01-JUN-2001; 2001US-00872035.
 01-JUN-2001; 2001US-00872035.
 05-JUN-2001; 2001US-00874503.
 14-JUN-2001; 2001US-00882636.
 19-JUN-2001; 2001US-00886342.
 20-JUN-2001; 2001US-00886342.
 21-JUN-2001; 2001US-00887879.
 22-JUN-2001; 2001US-00887879.
 29-JUN-2001; 2001US-00887879.
 09-JUL-2001; 2001US-00887879.
 18-JUL-2001; 2001US-00887879.
 06-AUG-2001; 2001US-00887879.
 09-AUG-2001; 2001US-00887879.
 16-AUG-2001; 2001US-00887879.
 19-DEC-2001; 2001US-00028072.
 (GETH) GENENTECH INC.
 Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 WPI; 2003-708391/67.
 N-PSDB; ADE30351.
 New isolated PRO polypeptides e.g. PRO1801 and PRO1114, useful in the
 preparation of a medicament for treating a condition responsive to PRO
 polypeptide, and as therapeutic agents e.g. vaccines.
 Claim 12; Fig 172; 660pp; English.
 The invention relates to isolated human PRO polypeptides (secreted and
 transmembrane polypeptides) and the polynucleotides encoding them. The
 invention also relates to an antibody which specifically binds to a PRO
 polypeptide, a method for stimulating the release of tumour necrosis
 factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 proliferation or differentiation of chondrocyte cells and a method for
 detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 polynucleotides are useful in molecular biology, including uses as
 hybridisation probes, in chromosome and gene mapping, in generating
 antisense RNA and DNA and in gene therapy. The polynucleotides may also
 be used in preparing PRO polypeptides by recombinant techniques and in
 generating either transgenic animals or knock-out animals which are
 useful in the development and screening of therapeutically useful
 reagents. The PRO polypeptides or antibodies are used in preparing a
 medicament for treating a condition responsive to the polypeptides or
 antibodies, such as tumours, for stimulating and inhibiting proliferation
 of human microvascular endothelial cells, for modulating the uptake of
 glucose or FFA by skeletal muscle cells or adipocyte cells, for
 stimulating differentiation of adipocyte cells, for stimulating
 proliferation of or gene expression in pericyte cells, for stimulating
 the proliferation of inner ear utricular supporting cells or T-lymphocyte
 cells, for inducing endothelial cell tube formation and for treating
 various bone and/or cartilage disorders such as sports injuries and
 arthritis. PRO polypeptides which stimulate the release of proteoglycans
 from cartilage are useful for treating sports-related joint problems,
 articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 polypeptides are also useful for treating various mammalian haemoglobin-
 associated disorders such as various thalassaemias and conditions which
 may benefit from enhanced local immune system cell infiltration. This
 sequence represents a human PRO polypeptide of the invention. Note: The
 sequence data for this patent is also available in electronic format from
 the USPTO website at seqdata.uspto.gov.

XX SQ Sequence 182 AA;
 Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MPEQLGPEAAALRPGWALLLVWSALSCSFSLPASSLSLVPPQVTSYNGRTFLGLDKC 60
 DB 1 MPEQLGPEAAALRPGWALLLVWSALSCSFSLPASSLSLVPPQVTSYNGRTFLGLDKC 60
 QY 61 NACIGTSICKKFKKIRSDNWLASHLGLPPDLSLLYPANYSDDSKIKWRPVEIFRLVSKY 120
 DB 61 NACIGTSICKKFKKIRSDNWLASHLGLPPDLSLLYPANYSDDSKIKWRPVEIFRLVSKY 120
 QY 121 QNEISDR 127
 DB 121 QNEISDR 127
 RESULT 25
 ADA85648
 ID ADA85648 standard; protein; 182 AA.
 AC ADA85648;
 XX 20-NOV-2003 (first entry)
 DT 20-NOV-2003 (first entry)
 DE Novel human secreted and transmembrane protein PRO3743.
 XX Human; secreted and transmembrane protein; PRO;
 KW Tumour necrosis factor alpha release; TNF-alpha release;
 KW Glucose uptake modulator; FFA uptake modulator;
 KW cell proliferation stimulator; cell differentiation stimulator;
 KW cell differentiation inhibitor; cytokine release stimulator; tumour;
 KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
 KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
 KW gene therapy; chromosome identification; chromosome marker.
 XX Homo sapiens.
 OS US2003082693-A1.
 PN 01-MAY-2003.
 PD 22-APR-2002; 2002US-00127843.
 PP 05-JUN-2000; 2000US-0209032P.
 PR 01-DEC-2000; 2000MO-US032678.
 PR 19-DEC-2001; 2001US-00028072.
 PA (GETH) GENENTECH INC.
 XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-786907/74.
 DR N-PSDB; ADA85647.
 XX New PRO nucleic acid, useful for preparing a composition for treating
 e.g., tumor or for tissue typing.
 PT Claim 12; Fig 172; 637pp; English.
 XX The invention describes 305 nucleic acids encoding PRO (secreted and
 transmembrane) polypeptides (I). (I) is useful for stimulating the
 release of TNF-alpha from human blood, for modulating the uptake of
 glucose or FFA by skeletal muscle cells or adipocyte cells, for
 stimulating the proliferation or differentiation of chondrocyte cells,
 for stimulating the proliferation of or gene expression in pericyte
 cells, for stimulating the release of proteoglycans from cartilage, for
 stimulating the proliferation of inner ear utricular supporting cells,

CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
 CC the release of a cytokine from PMC cells, for inhibiting the binding of
 CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
 CC cells, for stimulating proliferation of endothelial cells, for detecting
 CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
 CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
 CC are useful for isolating genomic and cDNA nucleotide sequences or
 CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
 CC in assays to identify other proteins or molecules involved in binding
 CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
 CC and gene mapping, in generation of antisense RNA and DNA, in the
 CC preparation of PRO polypeptide, for generating transgenic animals or
 CC knockout animals which in turn are useful in the development and
 CC screening of therapeutically useful reagents, in gene therapy, for
 CC chromosome identification, as chromosome marker, and for generating
 CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
 CC detecting its expression in specific cells, tissues or serum, and for
 CC affinity purification of PRO from recombinant cell culture or natural
 CC sources. (I) and (II) are useful for tissue typing. This is the amino
 CC acid sequence of a novel human secreted and transmembrane PRO
 CC polypeptide.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. NO. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
 DB 1 MEPQLGPEAAALRPGWLLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
 QY 61 NACIGTSCCKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIMRPVEIFRLVSKY 120
 DB 61 NACIGTSCCKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIMRPVEIFRLVSKY 120
 QY 121 QNEISDR 127
 DB 121 QNEISDR 127

RESULT 26

ADA96860

ID ADA96860 standard; protein; 182 AA.

XX ADA96860;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
 KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
 KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
 KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.

XX Homo sapiens.

XX US2003082705-A1.

XX 01-MAY-2003.

XX 24-APR-2002; 2002US-00131829.

XX 09-DEC-1999; 99US-0170262P.

XX 01-DEC-2000; 2000WC-US032678.

XX 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desroyers L, Filvaroff E, Gao W;
 XX Gerritsen ME, Goddard A, Godowski PU, Gurney AL, Sherwood S;
 XX Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI: 2003-755112/71.
 XX N-PSDB; ADA96859.

XX New PRO nucleic acid, useful for preparing a composition for treating
 XX e.g., tumor or for tissue typing.

XX Claim 12; Fig 172; 637pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a
 CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 CC of human microvascular endothelial cells, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC proliferation of or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 CC from cartilage are useful for treating sports-related joint problems,
 CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassaemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The
 CC sequence data for this patent is also available in electronic format from
 CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. NO. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
 DB 1 MEPQLGPEAAALRPGWLLALLWVSALSCSFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
 QY 61 NACIGTSCCKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIMRPVEIFRLVSKY 120
 DB 61 NACIGTSCCKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKIMRPVEIFRLVSKY 120
 QY 121 QNEISDR 127
 DB 121 QNEISDR 127

RESULT 27

ADA79164

ID ADA79164 standard; protein; 182 AA.

XX ADA79164;

CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or PFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems. PRO
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MEPOLGPEAALRPGWALLLWVLSALSCFSLPSSLSLVQVQRTSYNFGRTFLGLDKC 60
DB 1 MEPOLGPEAALRPGWALLLWVLSALSCFSLPSSLSLVQVQRTSYNFGRTFLGLDKC 60
QY 61 NACITGTSICKKFKKEIRSDNWLASHLGLPDSLLSYPNYSDDSKIWPRVEIFRLVSKY 120
DB 61 NACITGTSICKKFKKEIRSDNWLASHLGLPDSLLSYPNYSDDSKIWPRVEIFRLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 28

ADA87303
ID ADA87303 standard; protein; 182 AA.

AC ADA87303;

DT 20-NOV-2003 (first entry)

XX Novel human secreted and transmembrane protein PRO3743.

XX Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; PFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.

XX Homo sapiens.

XX US2003087345-A1.

XX 08-MAY-2003.

XX 16-APR-2002; 2002US-00123907.

PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 29-OCT-1998; 98WO-US022992.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US0003106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 10-MAR-1999; 2000WO-US006319.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028555.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.

CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC the proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems. PRO
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAARLRPGWALLLWVSALSCSFSPASSLSLVQVRTSYNFGRTFLGLDKC 60
Db 1 MEPOLGPEAARLRPGWALLLWVSALSCSFSPASSLSLVQVRTSYNFGRTFLGLDKC 60
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKINRPFVIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKINRPFVIFRLVSKY 120

Qy 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 30
ADA91597

ID ADA91597 standard; protein; 182 AA.

XX AC ADA91597;

XX DT 20-NOV-2003 (first entry)

XX DE Novel human secreted and transmembrane protein PRO3743.

XX KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.

XX CS Homo sapiens.

XX FN US2003082694-A1.

XX PD 01-MAY-2003.

XX PF 22-APR-2002; 2002US-00127845.

XX 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-00032678.
PR 19-DEC-2000; 2001US-00028072.
XX (GETH) GENENTECH INC.
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski P, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WJ, Zhang Z;
XX WPI: 2003-786908/74.
DR N-PSDB; ADA91596.
XX New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT or a composition for treating e.g., tumor or for tissue typing.
XX Claim 12; Fig 172; 637pp; English.

XX The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBM cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAARLRPGWALLLWVSALSCSFSPASSLSLVQVRTSYNFGRTFLGLDKC 60
Db 1 MEPOLGPEAARLRPGWALLLWVSALSCSFSPASSLSLVQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKINRPFVIFRLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDLSLLSYPNYSDDSKINRPFVIFRLVSKY 120

Qy 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 31

ADB14660

ID ADB14660 standard; protein; 182 AA.

XX AC ADB14660;

XX DT 20-NOV-2003 (first entry)
XX DE Human PRO polypeptide #86.
XX KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX OS Homo sapiens.
XX PN US2003087351-A1.
XX PD 08-MAY-2003.
XX PF 22-APR-2002; 2002US-00127822.
XX PR 17-JUN-1998; 98JS-0089532P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99JS-00380137.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX (GETH) GENENTECH INC.
XX Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-786942/74.
DR N-PSDB; ADH14659.
XX New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX Claim 12; Fig 172; 637pp; English.
XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-

CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.
XX USPTO at seqdata.uspto.gov/sequence.html.
SQ Sequence 182 AA;
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MEPOLGPRAAALPGWLALLLWVSALSCSFLPASSLSLVPOVRTSYNFGRTFLGDKC 60
Db 1 MEPOLGPRAAALPGWLALLLWVSALSCSFLPASSLSLVPOVRTSYNFGRTFLGDKC 60
Qy 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDSLSYSPANYSDDSKIKRWPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDSLSYSPANYSDDSKIKRWPVEIFRLVSKY 120
Qy 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 32
ADBI8621
ID ADBI8621 standard; protein; 182 AA.
XX AC ADBI8621;
XX DT 20-NOV-2003 (first entry)
XX DE Novel human secreted and transmembrane protein PRO3743.
XX KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW Glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release.
XX OS Homo sapiens.
XX PN US2003073211-A1.
XX PD 17-APR-2003.
XX PF 15-APR-2002; 2002US-00123292.
XX PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUN-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 29-OCT-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.

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PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 05-JAN-2000; 99WO-US031274.
PR 06-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US0003565.
PR 18-FEB-2000; 2000WO-US0003431.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004514.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.

PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX (GETH ) GENENTECH INC.
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W,
PI Gerritsen ME, Goddard A, Godowski P, Gurney AL, Sherwood S,
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-695954/66.
DR N-PSDB; ADB18620.
XX New isolated nucleic acid and encoded PRO polypeptide, are useful in the
PT diagnosis and treatment of cancer.
XX Claim 12; Fig 172; 638pp; English.
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyt
XX Sequence 182 AA;
SQ
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALPGKMLALLWVLSALSCSPSLPSSLSLVLPQVRTSYNFRTEFLGLDKC 60
DB 1 MEPQLGPEAAALPGKMLALLWVLSALSCSPSLPSSLSLVLPQVRTSYNFRTEFLGLDKC 60
QY 61 NACIGTSICKPFKEIRSDNWLASHLGLPPDLSLSPANYSDSDSKINRPVEIFRLVSKY 120
DB 61 NACIGTSICKPFKEIRSDNWLASHLGLPPDLSLSPANYSDSDSKINRPVEIFRLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127
RESULT 33
ADA93836
ID ADA93836 standard; protein; 182 AA.
XX ADA93836;
XX 20-NOV-2003 (first entry)
DE Human PRO polypeptide #86.
XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX Homo sapiens.
OS US200307722-A1.
XX 24-APR-2003.
PD 03-MAY-2002; 2002US-00137872.
PF 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
```

XX PA (GETH) GENENTECH INC.

XX PI Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;

XX PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

XX PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX DR WPI: 2003-755077/71.

XX DR N-PSDB; ADA93835.

XX PT New isolated, secreted and transmembrane PRO nucleic acid, useful for the

XX PT diagnosis, prevention and/or treatment of tumors, such as lung, colon,

XX PT breast, prostate, rectal, cervical and/or liver tumors.

XX PS Claim 12; Fig 172; 637pp; English.

XX CC The invention relates to isolated human PRO polypeptides (secreted and

XX CC transmembrane polypeptides) and the polynucleotides encoding them. The

XX CC invention also relates to an antibody which specifically binds to a PRO

XX CC polypeptide, a method for stimulating the release of tumour necrosis

XX CC factor- α (TNF- α) from human blood, a method for stimulating the

XX CC proliferation or differentiation of chondrocyte cells and a method for

XX CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,

XX CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The

XX CC polynucleotides are useful in molecular biology, including uses as

XX CC hybridisation probes, in chromosome and gene mapping, in generating

XX CC antisense RNA and DNA and in gene therapy. The polynucleotides may also

XX CC be used in preparing PRO polypeptides by recombinant techniques and in

XX CC generating either transgenic animals or knock-out animals which are

XX CC useful in the development and screening of therapeutically useful

XX CC reagents. The PRO polypeptides or antibodies are used in preparing a

XX CC medicament for treating a condition responsive to the polypeptides or

XX CC antibodies, such as tumours, for stimulating and inhibiting proliferation

XX CC of human microvascular endothelial cells, for modulating the uptake of

XX CC glucose or FFA by skeletal muscle cells or adipocyte cells, for

XX CC stimulating differentiation of adipocyte cells, for stimulating

XX CC the proliferation of inner ear utricular supporting cells or T-lymphocyte

XX CC cells, for inducing endothelial cell tube formation and for treating

XX CC various bone and/or cartilage disorders such as sports injuries and

XX CC arthritis. PRO polypeptides which stimulate the release of proteoglycans

XX CC from cartilage are useful for treating sports-related joint problems,

XX CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO

XX CC polypeptides are also useful for treating various mammalian haemoglobin-

XX CC associated disorders such as various thalassaemias and conditions which

XX CC may benefit from enhanced local immune system cell infiltration. This

XX CC sequence represents a human PRO polypeptide of the invention. Note: The

XX CC sequence data for this patent is also available in electronic format from

XX CC USPTO at seqdata.uspto.gov/sequence.html.

XX SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;

Best Local Similarity 100.0%; Pred. No. 4e-109;

Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALPGMALLLWVLSALSCSFLPASLSLLVPOVRYNFGRLFLGDKC 60

DB 1 MEPQLGPEAAALPGMALLLWVLSALSCSFLPASLSLLVPOVRYNFGRLFLGDKC 60

QY 61 NACIGTSICKKFKFEIRSDNNWLASHLGLPDSLSLSPANYSDSKIWRFVEIFRLVSKY 120

DB 61 NACIGTSICKKFKFEIRSDNNWLASHLGLPDSLSLSPANYSDSKIWRFVEIFRLVSKY 120

QY 121 QNEISDR 127

DB 121 QNEISDR 127

RESULT 34

ADB19732

ID ADB19732 standard; protein; 182 AA.

XX

AC ADB19732;

XX 20-NOV-2003 (first entry)

XX Novel human secreted and transmembrane protein PRO3743.

XX Human; secreted and transmembrane protein; PRO;

XX Tumour necrosis factor α release; TNF- α release;

XX Glucose uptake modulator; FFA uptake modulator;

XX cell proliferation stimulator; cell differentiation stimulator;

XX cell differentiation inhibitor; cytokine release stimulator; tumour;

XX lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;

XX cervical tumour; liver tumour; chromosome mapping; gene mapping;

XX gene therapy; chromosome identification; chromosome marker.

XX Homo sapiens.

XX US2003082691-A1.

XX 01-MAY-2003.

XX 22-APR-2002; 2002US-00127838.

XX 17-NOV-1998; 98US-0108802P.

XX 01-SEP-1999; 99WO-US020111.

XX 18-OCT-1999; 99US-00403297.

XX 18-FEB-2000; 2000WO-US004342.

XX 22-JUN-2000; 2000WO-US015264.

XX 23-AUG-2000; 2000WO-US023522.

XX 31-DEC-2000; 2000WO-US032678.

XX 19-DEC-2001; 2001US-00028072.

XX (SETH) GENENTECH INC.

XX Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;

XX Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;

XX Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI: 2003-755108/71.

XX N-PSDB; ADB19731.

XX PRO nucleic acid, useful for preparing a composition for treating e.g.,

XX tumor or for tissue typing.

XX Claim 12; Fig 172; 637pp; English.

XX The invention describes 305 nucleic acids encoding PRO (secreted and

XX transmembrane) polypeptides (I). (I) is useful for stimulating the

XX release of TNF- α from human blood, for modulating the uptake of

XX glucose or FFA by skeletal muscle cells or adipocyte cells, for

XX stimulating the proliferation or differentiation of chondrocyte cells,

XX for stimulating the proliferation of or gene expression in pericyte

XX cells, for stimulating the release of proteoglycans from cartilage, for

XX stimulating the proliferation of inner ear utricular supporting cells,

XX for stimulating the proliferation of T-lymphocyte cells, for stimulating

XX the release of a cytokine from BMC cells, for inhibiting the binding of

XX A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte

XX cells, for stimulating proliferation of endothelial cells, for detecting

XX the presence of tumour in a mammal. The tumour is lung, colon, breast,

XX prostate, rectal, cervical or liver tumour. The oligonucleotide probes

XX are useful for isolating genomic and cDNA nucleotide sequences or

XX antisense probes. (I) is also useful as therapeutic agent. PRO is useful

XX in assays to identify other proteins or molecules involved in binding

XX interaction. A polynucleotide (II) encoding (I) is useful in chromosome

XX and gene mapping, in generation of antisense RNA and DNA, in the

XX preparation of PRO polypeptide, for generating transgenic animals or

XX knockout animals which in turn are useful in the development and

XX screening of therapeutically useful reagents, in gene therapy, for

XX chromosome identification, as chromosome marker, and for generating

XX probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.

XX detecting its expression in specific cells, tissues or serum, and for

XX affinity purification of PRO from recombinant cell culture or natural

XX sources. (I) and (II) are useful for tissue typing. This is the amino

```
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.
XX
SQ Sequence 182 AA;

Query Match      69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPRAAALRPGWALLLWVSALSCSFSLPSSLSLPVQVTSYNGRTFLGLDKC 60
DB 1 MEPQLGPRAAALRPGWALLLWVSALSCSFSLPSSLSLPVQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKPFKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
DB 61 NACIGTSICKPFKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 35
ADB13044
ID ADB13044 standard; protein; 182 AA.
XX
AC ADB13044;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082710-A1.
XX
PD 01-MAY-2003.
XX
PF 16-MAY-2002; 2002US-00147484.
XX
PR 09-DEC-1999; 99US-0170262P.
XX
PR 01-DEC-2000; 2000WO-US032678.
XX
PR 19-DEC-2001; 2001US-00028072.
XX
FA (GETH ) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WL, Zhang Z;
XX
DR WPI; 2003-786913/74.
DR N-PSDB; ADB13043.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT preparing a composition for treating e.g., tumor, or for tissue typing.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
```

```
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC the proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells and for treating
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 182 AA;
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Query Match      69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPRAAALRPGWALLLWVSALSCSFSLPSSLSLPVQVTSYNGRTFLGLDKC 60
DB 1 MEPQLGPRAAALRPGWALLLWVSALSCSFSLPSSLSLPVQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKPFKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
DB 61 NACIGTSICKPFKEIRSDNWLASHLGLPPDSLSYPANYSDDSKIMRPVEIFRLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127
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RESULT 36
ABO43234
ID ABO43234 standard; protein; 182 AA.
XX
AC ABO43234;
XX
DT 26-SEP-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.
XX
KW Human; secreted and transmembrane protein; PRO; gene therapy;
KW chromosome identification; tissue typing.
XX
OS Homo sapiens.
XX
PN US200304945-A1.
XX
PD 06-MAR-2003.
XX
PF 10-MAY-2002; 2002US-00142419.
XX
PR 31-MAR-1997; 97WO-US005230.
XX
PR 22-JUN-1998; 98WO-US012456.
XX
PR 24-JUL-1998; 98WO-US014552.
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28-AUG-1998; 98WO-US017888.
10-SEP-1998; 98WO-US018824.
14-SEP-1998; 98WO-US019093.
14-SEP-1998; 98WO-US019094.
16-SEP-1998; 98WO-US019177.
16-SEP-1998; 98WO-US019330.
17-SEP-1998; 98WO-US019437.
07-OCT-1998; 98WO-US021141.
29-OCT-1998; 98WO-US022991.
29-OCT-1998; 98WO-US022992.
30-NOV-1998; 98WO-US024855.
01-DEC-1998; 98WO-US025108.
05-JAN-1999; 99WO-US000106.
08-MAR-1999; 99WO-US005028.
10-MAR-1999; 99WO-US005190.
20-APR-1999; 99WO-US008615.
14-MAY-1999; 99WO-US010733.
01-SEP-1999; 99WO-US020111.
08-SEP-1999; 99WO-US020594.
13-SEP-1999; 99WO-US020944.
15-SEP-1999; 99WO-US021090.
15-SEP-1999; 99WO-US021547.
05-OCT-1999; 99WO-US023089.
29-NOV-1999; 99WO-US028214.
30-NOV-1999; 99WO-US028313.
30-NOV-1999; 99WO-US028409.
01-DEC-1999; 99WO-US028301.
01-DEC-1999; 99WO-US028634.
02-DEC-1999; 99WO-US028551.
02-DEC-1999; 99WO-US028564.
02-DEC-1999; 99WO-US028565.
16-DEC-1999; 99WO-US030095.
20-DEC-1999; 99WO-US030911.
20-DEC-1999; 99WO-US030999.
22-DEC-1999; 99WO-US030720.
30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031274.
05-JAN-2000; 2000WO-US000219.
06-JAN-2000; 2000WO-US000277.
06-JAN-2000; 2000WO-US000376.
11-FEB-2000; 2000WO-US000365.
18-FEB-2000; 2000WO-US004341.
18-FEB-2000; 2000WO-US004342.
22-FEB-2000; 2000WO-US004414.
24-FEB-2000; 2000WO-US004914.
24-FEB-2000; 2000WO-US005004.
01-MAR-2000; 2000WO-US005601.
02-MAR-2000; 2000WO-US005746.
02-MAR-2000; 2000WO-US005841.
10-MAR-2000; 2000WO-US006319.
15-MAR-2000; 2000WO-US006684.
20-MAR-2000; 2000WO-US007377.
21-MAR-2000; 2000WO-US007532.
30-MAR-2000; 2000WO-US008439.
17-MAY-2000; 2000WO-US013705.
22-MAY-2000; 2000WO-US014042.
30-MAY-2000; 2000WO-US014941.
02-JUN-2000; 2000WO-US015264.
28-JUL-2000; 2000WO-US020710.
11-AUG-2000; 2000WO-US022031.
23-AUG-2000; 2000WO-US023522.
24-AUG-2000; 2000WO-US023328.
08-NOV-2000; 2000WO-US030952.
10-NOV-2000; 2000WO-US030873.
01-DEC-2000; 2000WO-US032678.
20-DEC-2000; 2000WO-US034956.
28-FEB-2001; 2001US-US007949.
28-FEB-2001; 2001US-US006520.
01-MAR-2001; 2001WO-US006566.
09-MAR-2001; 2001US-US008270.
14-MAR-2001; 2001US-US008689.

22-MAR-2001; 2001US-00816744.
05-APR-2001; 2001US-00828366.
10-MAY-2001; 2001US-00854208.
10-MAY-2001; 2001US-00854280.
18-MAY-2001; 2001US-00860216.
25-MAY-2001; 2001US-00866028.
25-MAY-2001; 2001US-00865034.
25-MAY-2001; 2001US-00871092.
01-JUN-2001; 2001US-00872035.
01-JUN-2001; 2001WO-US017800.
05-JUN-2001; 2001US-00874503.
14-JUN-2001; 2001US-00882636.
19-JUN-2001; 2001US-00886342.
20-JUN-2001; 2001WO-US015692.
21-JUN-2001; 2001US-00887879.
22-JUN-2001; 2001WO-US020116.
29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
18-JUL-2001; 2001US-00908827.
08-AUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00927796.
16-AUG-2001; 2001US-00931836.
19-DEC-2001; 2001US-00028072.

XX (GETH ) GENENTECH INC.
PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-492275/46.
DR N-PSDB; ACD98509.
XX
XX
PT New transmembrane polypeptides and nucleic acids encoding the
PT polypeptides, useful in gene therapy, in chromosome identification, as
PT chromosome markers, or in generating probes.
XX
XX Claim 12; Fig 172; 660pp; English.
XX
XX The invention describes an isolated nucleic acid encoding a PRO (secreted
CC and transmembrane) polypeptide. Nucleic acids which encode PRO can be
CC used to generate either transgenic animals or knock-out animals useful in
CC developing and screening of therapeutically useful reagents. The nucleic
CC acids may also be used in gene therapy, in chromosome identification, as
CC chromosome markers, or in generating probes. The PRO polypeptides are
CC useful as molecular markers for protein electrophoresis, and the isolated
CC nucleic acids may be used for recombinantly expressing those markers. The
CC PRO polypeptides and nucleic acids may also be used in tissue typing.
CC Anti-PRO antibodies are useful in diagnostic assays for PRO, and in
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. This is the amino acid sequence of a novel human secreted and
CC transmembrane PRO polypeptide
XX
XX Sequence 182 AA;
SQ
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALPGWLALLWYVALSCSFLSPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
DB 1 MEPQLGPEAAALPGWLALLWYVALSCSFLSPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKPFKEIRSDNWLASHGLPPDLSYPANYSDDSKIRWVEIFRLVSKY 120
DB 61 NACIGTSICKPFKEIRSDNWLASHGLPPDLSYPANYSDDSKIRWVEIFRLVSKY 120
QY 121 ONEISDR 127
DB 121 ONEISDR 127

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ADA74238
ID ADA74298 standard; protein; 182 AA.
XX
AC ADA74298;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumor necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; PFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
CS Homo sapiens.
XX
PN US2003068798-A1.
XX
PD 10-APR-2003.
XX
PF 07-MAY-2002; 2002US-00140928.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US000528.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012452.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 10-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030959.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007332.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 01-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX (GETH) GENENTECH INC.
XX Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;
XX Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
XX Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
DR WPI; 2003-625490/59.
DR N-PSDB; ADA74297.
XX
XX Novel secreted and transmembrane PRO polypeptides and polynucleotides
PT encoding them, useful for treating bone disorders, arthritis, heart
PT attack, injuries, tumors, and stimulating release of Tumor Necrosis
PT Factor-alpha from human blood.
XX
PS Claim 12; Fig 172; 659pp; English.
XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The

Db 61 NACIGTSICKFFKEEIRSDNWLSHLGLPPDSLSYPANYSDDSKIWPRVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 39
ADA82055
ID ADA82055 standard; protein; 182 AA.
XX
AC ADA82055;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082701-A1.
XX
PD 01-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128686.
XX
PR 31-AUG-1998; 98US-0098525P.
PR 16-SEP-1998; 98US-0100634P.
PR 02-JUN-1999; 98WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 02-JUN-2000; 2000WO-US015264.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
Pz Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Pz Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Pz Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755110/71.
DR N-PSDB; ADA82054.
XX
XX PRO nucleic acid, useful for preparing a composition for treating e.g.,
PT tumor or for tissue typing.
XX
PS Claim 12; Fig 172; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful

CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;

Best Local Similarity 100.0%; Pref. No. 4e-109;

Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPCWLLALLWVSALSCSFSLPASLSLVLPQVTSYNGFTFLGLDKC 63

Db 1 MEPQLGPEAAALRPCWLLALLWVSALSCSFSLPASLSLVLPQVTSYNGFTFLGLDKC 63

QY 61 NACIGTSICKFFKEEIRSDNWLSHLGLPPDSLSYPANYSDDSKIWPRVEIFRLVSKY 120

Db 61 NACIGTSICKFFKEEIRSDNWLSHLGLPPDSLSYPANYSDDSKIWPRVEIFRLVSKY 120

QY 121 QNEISDR 127

Db 121 QNEISDR 127

RESULT 40

ADA75018

ID ADA75018 standard; protein; 182 AA.

XX ADA75018;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;

XX tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;

XX cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;

XX liver; microvascular endothelial cell; glucose; FFA;

XX skeletal muscle cell; adipocyte cell; pericyte cell;

XX inner ear utricular supporting cell; T-lymphocyte cell;

XX endothelial cell tube formation; bone disorder; cartilage disorder;

XX sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

XX rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

XX immune system cell infiltration.

XX Homo sapiens.

OS US2003073216-A1.

XX 17-APR-2003.

XX 30-MAY-2002; 2002US-00160498.

XX 31-MAR-1997; 97WO-US005230.

XX 12-JUN-1998; 98WO-US012456.

XX 14-JUL-1998; 98WO-US014552.

XX 28-AUG-1998; 98WO-US017888.

XX 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 28-OCT-1998; 98WO-US022391.
PR 28-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 98WO-US000106.
PR 08-MAR-1999; 98WO-US005028.
PR 10-MAR-1999; 98WO-US005190.
PR 20-APR-1999; 98WO-US008615.
PR 14-MAY-1999; 98WO-US010733.
PR 02-JUN-1999; 98WO-US012252.
PR 01-SEP-1999; 98WO-US020111.
PR 08-SEP-1999; 98WO-US020594.
PR 13-SEP-1999; 98WO-US020344.
PR 15-SEP-1999; 98WO-US021090.
PR 15-SEP-1999; 98WO-US021547.
PR 05-OCT-1999; 98WO-US023089.
PR 29-NOV-1999; 98WO-US028214.
PR 30-NOV-1999; 98WO-US028313.
PR 30-NOV-1999; 98WO-US028409.
PR 01-DEC-1999; 98WO-US028301.
PR 01-DEC-1999; 98WO-US028634.
PR 02-DEC-1999; 98WO-US028551.
PR 02-DEC-1999; 98WO-US028564.
PR 02-DEC-1999; 98WO-US028565.
PR 16-DEC-1999; 98WO-US030095.
PR 20-DEC-1999; 98WO-US030911.
PR 20-DEC-1999; 98WO-US030999.
PR 22-DEC-1999; 98WO-US030720.
PR 30-DEC-1999; 98WO-US031243.
PR 30-DEC-1999; 98WO-US031274.
PR 05-JAN-2000; 98WO-US000219.
PR 05-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00806869.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001US-00886342.
PR 21-JUN-2001; 2001WO-US019692.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2003-765392/72.
DR N-PSDB; ADA75017.
XX
XX New secreted and transmembrane PRO polypeptides useful for stimulating
PT the release of tumor necrosis factor alpha in human blood and detecting
PT the presence of tumor in a mammal.
XX
PS Claim 12; Fig 172; 638pp; English.
XX
XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumor necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or PPA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USFTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 182 AA;

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Query Match      69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVQVTSYNGRTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWASHLGLPPDLSLLSYPNYSDSKIWPRVFIPLVSKY 120
DB 61 NACIGTSICKFFKEIRSDNWASHLGLPPDLSLLSYPNYSDSKIWPRVFIPLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 41
ADA85096
ID ADA85096 standard; protein; 182 AA.
XX AC ADA85096;
XX DT 20-NOV-2003 (first entry)
XX DE Novel human secreted and transmembrane protein PRO3743.
XX KW Human; secreted and transmembrane protein; PRO;
XX KW Tumour necrosis factor alpha release; TNF-alpha release;
XX KW glucose uptake modulator; FFA uptake modulator;
XX KW cell proliferation stimulator; cell differentiation stimulator;
XX KW cell differentiation inhibitor; cytokine release stimulator; tumour;
XX KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
XX KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
XX KW gene therapy; chromosome identification; chromosome marker.
XX OS Homo sapiens.
XX PN US2003082695-A1.
XX PD 01-MAY-2003.
XX PF 22-APR-2002; 2002US-00127846.
XX PR 03-MAR-2000; 2000US-0187202P.
XX PR 01-DEC-2000; 2000WO-US032678.
XX PR 19-DEC-2001; 2001US-00028372.
XX PA (GETH ) GENENTECH INC.
XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
XX PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
XX PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WL, Zhang Z;
XX PI WPI; 2003-786909/74.
XX DR N-PSDB; ADA85095.
XX PT New nucleic acid encoding a PRO polypeptide, useful for preparing a
XX PT composition for treating e.g. tumor by gene therapy, or for tissue
XX PT typing.
XX PS Claim 12; Fig 172; 637pp; English.
XX CC The invention describes 305 nucleic acids encoding PRO (secreted and
XX CC transmembrane) polypeptides (I). (I) is useful for stimulating the
XX CC release of TNF-alpha from human blood, for modulating the uptake of
XX CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
XX CC stimulating the proliferation or differentiation of chondrocyte cells,
XX CC for stimulating the proliferation of or gene expression in pericyte
XX CC cells, for stimulating the release of proteoglycans from cartilage, for
XX CC stimulating the proliferation of inner ear utricular supporting cells,
XX CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
XX CC the release of a cytokine from PBMC cells, for inhibiting the binding of
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CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
XX polypeptide.
XX SQ Sequence 182 AA;
XX Query Match      69.8%; Score 127; DB 6; Length 182;
XX Best Local Similarity 100.0%; Pred. No. 4e-109;
XX Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVQVTSYNGRTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSLVQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWASHLGLPPDLSLLSYPNYSDSKIWPRVFIPLVSKY 123
DB 61 NACIGTSICKFFKEIRSDNWASHLGLPPDLSLLSYPNYSDSKIWPRVFIPLVSKY 123
QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 42
ADA84544
ID ADA84544 standard; protein; 182 AA.
XX AC ADA84544;
XX DT 20-NOV-2003 (first entry)
XX DE Novel human secreted and transmembrane protein PRO3743.
XX KW Human; secreted and transmembrane protein; PRO;
XX KW Tumour necrosis factor alpha release; TNF-alpha release;
XX KW glucose uptake modulator; FFA uptake modulator;
XX KW cell proliferation stimulator; cell differentiation stimulator;
XX KW cell differentiation inhibitor; cytokine release stimulator; tumour;
XX KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
XX KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
XX KW gene therapy; chromosome identification; chromosome marker.
XX OS Homo sapiens.
XX PN US2003082708-A1.
XX PD 01-MAY-2003.
XX PF 15-MAY-2002; 2002US-00146729.
XX PR 05-JUN-2000; 2000US-0209832P.
XX PR 01-DEC-2000; 2000WO-US032678.
XX PR 19-DEC-2001; 2001US-00028072.
XX PA (GETH ) GENENTECH INC.
XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
```

PI Gerritsen YE, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas E, Watanabe CK, Wood WI, Zhang Z;
 XX WPI: 2003-786911/74.
 DR N-PSDB; ADA84543.
 XX
 PT New PRO nucleic acid, useful for preparing a composition for treating
 PT e.g. tumor or for tissue typing.
 XX
 PS Claim 12; Fig 172; 637pp; English.
 XX
 CC The invention describes 305 nucleic acids encoding PRO (secreted and
 CC transmembrane) polypeptides (I). (I) is useful for stimulating the
 CC release of TNF-alpha from human blood, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating the proliferation or differentiation of chondrocyte cells,
 CC for stimulating the proliferation of or gene expression in pericyte
 CC cells, for stimulating the release of proteoglycans from cartilage, for
 CC stimulating the proliferation of inner ear utricular supporting cells,
 CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
 CC the release of a cytokine from PBMC cells, for inhibiting the binding of
 CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
 CC cells, for stimulating proliferation of endothelial cells, for detecting
 CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
 CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
 CC are useful for isolating genomic and cDNA nucleotide sequences or
 CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
 CC in assays to identify other proteins or molecules involved in binding
 CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
 CC and gene mapping. In generation of antisense RNA and DNA, in the
 CC preparation of PRO polypeptide, for generating transgenic animals or
 CC knockout animals which in turn are useful in the development and
 CC screening of therapeutically useful reagents, in gene therapy, for
 CC chromosome identification, as chromosome marker, and for generating
 CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
 CC detecting its expression in specific cells, tissues or serum, and for
 CC affinity purification of PRO from recombinant cell culture or natural
 CC sources. (I) and (II) are useful for tissue typing. This is the amino
 CC acid sequence of a novel human secreted and transmembrane PRO
 CC polypeptide.
 XX
 SQ Sequence 182 AA;
 Query Match: 59.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MEPOLGPEAAALPGWALLLWLSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
 DB 1 MEPOLGPEAAALPGWALLLWLSALSCFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
 QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPDDSLSYYPANYSDSKIWRPVEIFRLVSKY 120
 DB 61 NACIGTSICKKFKKEIRSDNWLASHLGLPDDSLSYYPANYSDSKIWRPVEIFRLVSKY 120
 QY 121 QNEISDR 127
 DB 121 QNEISDR 127
 RESULT 43
 ADE29800
 ID ADE29800 standard; protein; 182 AA.
 XX
 AC ADE29800;
 XX
 XX 20-NOV-2003 (first entry)
 DT
 XX Human PRO polypeptide #86.
 XX
 XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
 XX tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
 XX cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
 XX

KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.
 XX
 OS Homo sapiens.
 XX
 PN US2003073214-A1.
 XX
 PD 17-APR-2003.
 XX
 PF 17-APR-2002; 2002US-00124822.
 XX
 PR 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 11-FEB-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 01-MAR-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 10-MAR-2000; 2000WO-US005841.
 PR 15-MAR-2000; 2000WO-US006319.
 PR 20-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.

30-MAR-2000; 2000WO-US008439.
 17-MAY-2000; 2000WC-US013705.
 22-MAY-2000; 2000WC-US014042.
 30-MAY-2000; 2000WC-US014941.
 02-JUN-2000; 2000WC-US015264.
 28-JUL-2000; 2000WO-US020710.
 1-AUG-2000; 2000WO-US022031.
 23-AUG-2000; 2000WO-US023522.
 24-AUG-2000; 2000WO-US023328.
 08-NOV-2000; 2000WO-US030952.
 01-DEC-2000; 2000WO-US030873.
 01-DEC-2000; 2000WO-US032678.
 20-DEC-2000; 2000US-00747259.
 20-DEC-2000; 2000WO-US034956.
 28-FEB-2001; 2001US-00796498.
 28-FEB-2001; 2001WO-US006520.
 01-MAR-2001; 2001WO-US006666.
 09-MAR-2001; 2001US-00802706.
 14-MAR-2001; 2001US-00808689.
 22-MAR-2001; 2001US-00816744.
 05-APR-2001; 2001US-00828366.
 10-MAY-2001; 2001US-00854208.
 10-MAY-2001; 2001US-00854280.
 18-MAY-2001; 2001US-00860216.
 25-MAY-2001; 2001US-00866028.
 25-MAY-2001; 2001US-00866034.
 25-MAY-2001; 2001WO-US017092.
 01-JUN-2001; 2001US-00872035.
 01-JUN-2001; 2001WO-US017800.
 05-JUN-2001; 2001US-00874503.
 14-JUN-2001; 2001US-00882636.
 19-JUN-2001; 2001US-00886342.
 20-JUN-2001; 2001WO-US019692.
 21-JUN-2001; 2001US-00887879.
 22-JUN-2001; 2001WO-US020116.
 29-JUN-2001; 2001WO-US021066.
 09-JUL-2001; 2001WO-US021735.
 18-JUL-2001; 2001US-00908827.
 06-AUG-2001; 2001US-00924419.
 09-AUG-2001; 2001US-00927796.
 16-AUG-2001; 2001US-00931836.
 19-DEC-2001; 2001US-00028072.
 XX
 PA (GETH) GENENTECH INC.
 XX
 Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
 XX
 DR WPI; 2003-720081/68.
 DR N-PSDB; ADB29799.
 XX
 PT Novel secreted and transmembrane PRO polypeptides useful for stimulating
 PT the release of tumor necrosis factor alpha and detecting the presence of
 PT a tumor in a mammal.
 XX
 PS Claim 12; Fig 172; 638pp; English.
 XX
 CC The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumor necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a

CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 CC of human microvascular endothelial cells, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC proliferation of or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 CC from cartilage are useful for treating sports-related joint problems,
 CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassaemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The
 CC sequence data for this patent is also available in electronic format from
 CC the USPTO website at seqdata.uspto.gov.
 XX
 SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWALLLWVSALSCSFSLPSSLSLVQVRTSYNFGRTFLGDKC 60
 |||||
 DB 1 MEPQLGPEAAALRPGWALLLWVSALSCSFSLPSSLSLVQVRTSYNFGRTFLGDKC 60
 |||||
 QY 61 NACIGTSICKPKFKRIRSDNWLASHLGLPPDSLLSYPNYSDSKIWRFVEIFRLVSKY 120
 |||||
 DB 61 NACIGTSICKPKFKRIRSDNWLASHLGLPPDSLLSYPNYSDSKIWRFVEIFRLVSKY 120
 |||||
 QY 121 QNEISDR 127
 |||||
 DB 121 QNEISDR 127
 |||||

RESULT 44

ADA80328
 ID ADA80328 standard; protein; 182 AA.

XX ADA80328;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;

XX tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;

XX cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;

XX liver; microvascular endothelial cell; glucose; FFA;

XX skeletal muscle cell; adipocyte cell; pericyte cell;

XX inner ear utricular supporting cell; T-lymphocyte cell;

XX endothelial cell tube formation; bone disorder; cartilage disorder;

XX sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

XX rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

XX immune system cell infiltration.

XX Homo sapiens.

OS US2003082761-A1.

PN 01-MAY-2003.

XX 12-APR-2002; 2002US-00121061.

XX 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 27-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022992.
PR 29-OCT-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006684.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 20-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001US-00796498.
PR 01-MAR-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006566.
PR 09-MAR-2001; 2001US-00822706.
PR 14-MAR-2001; 2001US-00836689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-03854280.
PR 18-MAY-2001; 2001US-03860216.
PR 25-MAY-2001; 2001US-03866028.
PR 25-MAY-2001; 2001US-03866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-03872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-03874503.
PR 14-JUN-2001; 2001US-03882636.
PR 19-JUN-2001; 2001US-03886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-03887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-03908827.
PR 06-AUG-2001; 2001US-03924419.
PR 09-AUG-2001; 2001US-03927796.
PR 16-AUG-2001; 2001US-03931836.
PR 19-DEC-2001; 2001US-03928072.
PR XX
PR (GETH) GENENTECH INC.
PR Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PR Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PR Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
PR WPI; 2003-755115/71.
PR N-PSDB; ADA80327.
PR XX
PR New PRO polypeptides useful for treating diabetes, hyper- or hypo-
PR insulinemia, sports injuries, arthritis, obesity, stroke, heart attack,
PR various coagulation disorders and tumors.
PR XX
PR Claim 12; Fig 172; 638pp; English.
PR XX
PR The invention relates to isolated human PRO polypeptides (secreted and
PR transmembrane polypeptides) and the polynucleotides encoding them. The
PR invention also relates to an antibody which specifically binds to a PRO
PR polypeptide, a method for stimulating the release of tumour necrosis
PR factor-alpha (TNF-alpha) from human blood, a method for stimulating the
PR proliferation or differentiation of chondrocyte cells and a method for
PR detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
PR colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
PR polynucleotides are useful in molecular biology, including uses as
PR hybridisation probes, in chromosome and gene mapping, in generating
PR antisense RNA and DNA and in gene therapy. The polynucleotides may also
PR be used in preparing PRO polypeptides by recombinant techniques and in
PR generating either transgenic animals or knock-out animals which are
PR useful in the development and screening of therapeutically useful
PR reagents. The PRO polypeptides or antibodies are used in preparing a
PR medicament for treating a condition responsive to the polypeptides or
PR antibodies, such as tumours, for stimulating and inhibiting proliferation
PR of human microvascular endothelial cells, for modulating the uptake of
PR glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating
PR the proliferation of or gene expression in pericyte cells, for stimulating
PR the proliferation of inner ear utricular supporting cells or T-lymphocyte
PR cells, for inducing endothelial cell tube formation and for treating
PR various bone and/or cartilage disorders such as sports injuries and
PR arthritis. PRO polypeptides which stimulate the release of proteoglycans
PR from cartilage are useful for treating sports-related joint problems,
PR articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
PR polypeptides are also useful for treating various mammalian haemoglobin-
PR associated disorders such as various thalassemias and conditions which
PR may benefit from enhanced local immune system cell infiltration. This
PR sequence represents a human PRO polypeptide of the invention. Note: The
PR sequence data for this patent is also available in electronic format from
PR USPTO at seqdata.uspto.gov/sequence.html.
PR XX
PR Sequence 182 AA;
PR Query Match 59.8%; Score 127; DS 6; Length 182;

Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWALLLWVLSALSCSFSLPASS:SSLVPOVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWALLLWVLSALSCSFSLPASS:SSLVPOVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIMRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIMRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 45
ADA75570
ID ADA75570 standard; protein; 182 AA.
XX ADA75570;
AC
XX 20-NOV-2003 (first entry)
DT
XX Human PRO polypeptide #86.
DE
XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
XX US2003082703-A1.
XX
XX 01-MAY-2003.
XX
XX 23-APR-2002; 2002US-00128691.
XX
XX 09-DEC-1999; 99JTS-0170262P.
XX
XX 01-DEC-2000; 2000MO-US032678.
XX
XX 19-DEC-2001; 2001US-00028072.
XX
XX (GETH) GENENTECH INC.
XX
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
XX Geritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
XX Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2003-765414/72.
XX
XX DR N-PSDB; ADA75569.
XX
XX New PRO nucleic acid, useful for preparing a composition for treating
XX e.g., tumor or for tissue typing.
XX
XX Claim 12; Fig 172; 637pp; English.
XX
XX The invention relates to isolated human PRO polypeptides (secreted and
XX transmembrane polypeptides) and the polynucleotides encoding them. The
XX invention also relates to an antibody which specifically binds to a PRO
XX polypeptide, a method for stimulating the release of tumour necrosis
XX factor-alpha (TNF-alpha) from human blood, a method for stimulating the
XX proliferation or differentiation of chondrocyte cells and a method for
XX detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
XX colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
XX polynucleotides are useful in molecular biology, including uses as
XX hybridisation probes, in chromosome and gene mapping, in generating

antisense RNA and DNA and in gene therapy. The polynucleotides may also
be used in preparing PRO polypeptides by recombinant techniques and in
generating either transgenic animals or knock-out animals which are
useful in the development and screening of therapeutically useful
reagents. The PRO polypeptides or antibodies are used in preparing a
medicament for treating a condition responsive to the polypeptides or
antibodies, such as tumours, for stimulating and inhibiting proliferation
of human microvascular endothelial cells, for modulating the uptake of
glucose or FFA by skeletal muscle cells or adipocyte cells, for
stimulating differentiation of adipocyte cells, for stimulating
proliferation of or gene expression in pericyte cells, for stimulating
the proliferation of inner ear utricular supporting cells or T-lymphocyte
cells, for inducing endothelial cell tube formation and for treating
various bone and/or cartilage disorders such as sports injuries and
arthritis. PRO polypeptides which stimulate the release of proteoglycans
from cartilage are useful for treating sports-related joint problems,
articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
polypeptides are also useful for treating various mammalian haemoglobin-
associated disorders such as various thalassaemias and conditions which
may benefit from enhanced local immune system cell infiltration. This
sequence represents a human PRO polypeptide of the invention. Note: The
sequence data for this patent is also available in electronic format from
USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWALLLWVLSALSCSFSLPASS:SSLVPOVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWALLLWVLSALSCSFSLPASS:SSLVPOVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIMRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIMRPVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 46

ADA46795
ID ADA46795 standard; protein; 182 AA.

XX ADA46795;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

OS Homo sapiens.

XX US2003073210-A1.

XX 17-APR-2003.

XX 11-APR-2002; 2002US-00121045.

XX 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 27-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 30-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 08-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US0038615.
 PR 14-MAY-1999; 99WO-US012733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US000365.
 PR 18-FEB-2000; 2000WO-US0004341.
 PR 18-FEB-2000; 2000WO-US0004342.
 PR 22-FEB-2000; 2000WO-US0004414.
 PR 24-FEB-2000; 2000WO-US0004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US00505601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006684.
 PR 20-MAR-2000; 2000WO-US0007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US0006520.
 PR 01-MAR-2001; 2001WO-US000566.

PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 PR XX (GETH) GENENTECH INC.
 PR XX Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;
 PR PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PR PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 PR XX WPI; 2003-644800/61.
 PR DR N-PSDB; ADA46794.
 PR XX
 PR XX New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
 PR PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
 PR PT generating antisense RNA and DNA, and in gene therapy.
 PR XX
 PR PS Claim 12; Fig 172; 638pp; English.
 PR XX
 PR CC The invention relates to isolated human PRO polypeptides (secreted and
 PR CC transmembrane polypeptides) and the polynucleotides encoding them. The
 PR CC invention also relates to an antibody which specifically binds to a PRO
 PR CC polypeptide, a method for stimulating the release of tumour necrosis
 PR CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 PR CC proliferation or differentiation of chondrocyte cells and a method for
 PR CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 PR CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 PR CC polynucleotides are useful in molecular biology, including uses as
 PR CC hybridisation probes, in chromosome and gene mapping, in generating
 PR CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 PR CC be used in preparing PRO polypeptides by recombinant techniques and in
 PR CC generating either transgenic animals or knock-out animals which are
 PR CC useful in the development and screening of therapeutically useful
 PR CC reagents. The PRO polypeptides or antibodies are used in preparing a
 PR CC medicament for treating a condition responsive to the polypeptides or
 PR CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 PR CC of human microvascular endothelial cells, for modulating the uptake of
 PR CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 PR CC stimulating differentiation of adipocyte cells, for stimulating
 PR CC proliferation of or gene expression in pericyte cells, for stimulating
 PR CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 PR CC cells, for inducing endothelial cell tube formation and for treating
 PR CC various bone and/or cartilage disorders such as sports injuries and
 PR CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 PR CC from cartilage are useful for treating sports-related joint problems,
 PR CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 PR CC polypeptides are also useful for treating various mammalian haemoglobin-
 PR CC associated disorders such as various thalassemias and conditions which
 PR CC may benefit from enhanced local immune system cell infiltration. This
 PR CC sequence represents a human PRO polypeptide of the invention. Note: The
 PR CC sequence data for this patent is also available in electronic format from

```
CC USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 182 AA;
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPOLGPEAALRPGWLALLLWVSALSCSFSLPASSLSLVQVQRTSYNFGRTFLGLDKC 60
Db 1 MEPOLGPEAALRPGWLALLLWVSALSCSFSLPASSLSLVQVQRTSYNFGRTFLGLDKC 60
QY 61 NACIGTICKFKFEIRSDNWLASHLGLPDSLSPANYSDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTICKFKFEIRSDNWLASHLGLPDSLSPANYSDSKIWPRVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 47
ADB25091
ID ADB25091 standard; protein; 182 AA.
XX
AC ADB25091;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide SEQ ID NO 172.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077715-A1.
XX
PD 24-APR-2003.
XX
PF 23-APR-2002; 2002US-00128693.
XX
PR 31-AUG-1998; 98US-0098525P.
PR 16-SEP-1998; 98US-0100634P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 02-JUN-2000; 2000WO-US015264.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH ) GENENTECH INC.
XX
PI Baker KP, Beresini M, DeForge L, Desroyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI: 2003-755070/71.
XX N-PSDB: ADB25090.
XX
XX New isolated, secreted and transmembrane PRO nucleic acids, useful for
XX the diagnosis, prevention and/or treatment of tumors, such as lung,
XX colon, breast, prostate, rectal, cervical and/or liver tumors.
XX
XX Claim 12; Fig 172; 637pp; English.
```

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XX The invention relates to isolated human PRO polypeptides (secreted and
XX transmembrane polypeptides) and the polynucleotides encoding them. The
XX invention also relates to an antibody which specifically binds to a PRO
XX polypeptide, a method for stimulating the release of tumour necrosis
XX factor-alpha (TNF-alpha) from human blood, a method for stimulating the
XX proliferation or differentiation of chondrocyte cells and a method for
XX detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
XX colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
XX polynucleotides are useful in molecular biology, including uses as
XX hybridisation probes, in chromosome and gene mapping, in generating
XX antisense RNA and DNA and in gene therapy. The polynucleotides may also
XX be used in preparing PRO polypeptides by recombinant techniques and in
XX generating either transgenic animals or knock-out animals which are
XX useful in the development and screening of therapeutically useful
XX reagents. The PRO polypeptides or antibodies are used in preparing a
XX medicament for treating a condition responsive to the polypeptides or
XX antibodies, such as tumours, for stimulating and inhibiting proliferation
XX of human microvascular endothelial cells, for modulating the uptake of
XX glucose or FFA by skeletal muscle cells or adipocyte cells, for
XX stimulating differentiation of adipocyte cells, for stimulating
XX the proliferation of or gene expression in pericyte cells, for stimulating
XX the proliferation of inner ear utricular supporting cells or T-lymphocyte
XX cells, for inducing endothelial cell tube formation and for treating
XX various bone and/or cartilage disorders such as sports injuries and
XX arthritis. PRO polypeptides which stimulate the release of proteoglycans
XX from cartilage are useful for treating sports-related joint problems,
XX articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
XX polypeptides are also useful for treating various mammalian haemoglobin-
XX associated disorders such as various thalassaemias and conditions which
XX may benefit from enhanced local immune system cell infiltration. This
XX sequence represents a human PRO polypeptide of the invention. Note: The
XX sequence data for this patent is also available in electronic format from
XX USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 182 AA;
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPOLGPEAALRPGWLALLLWVSALSCSFSLPASSLSLVQVQRTSYNFGRTFLGLDKC 60
Db 1 MEPOLGPEAALRPGWLALLLWVSALSCSFSLPASSLSLVQVQRTSYNFGRTFLGLDKC 60
QY 61 NACIGTICKFKFEIRSDNWLASHLGLPDSLSPANYSDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTICKFKFEIRSDNWLASHLGLPDSLSPANYSDSKIWPRVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 48
ADA93267
ID ADA93267 standard; protein; 182 AA.
XX
AC ADA93267;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
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XX immune system cell infiltration.
XX Homo sapiens.
XX US2003077721-A1.
XX 24-APR-2003.
XX 24-APR-2002; 2002US-00131837.
XX 09-DEC-1999; 99US-0170262P.
XX 01-DEC-2000; 2000WO-US032678.
XX 19-DEC-2001; 2001US-00023072.
XX (GETH) GENENTECH INC.
XX Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tomas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-755076/71.
DR N-PSDB; ADA93266.
XX New PRO nucleic acid, useful for recombinantly producing a PRO
PT polypeptide and for manufacturing a medicament for diagnosing or treating
PT tumor.
XX Claim 12; Fig 172; 637pp; English.
XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in e-electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.
XX USPTO at seqdata.uspto.gov/sequence.html.
XX Sequence 182 AA;
Query Match 69.8%; Score 127; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 4e-109;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEFQGPAAALRGWALLWVSALSCSPSLPASS:SSILVQVQRTSYNFGRTFLGLDKC 60
Db 1 MEFQGPAAALRGWALLWVSALSCSPSLPASS:SSILVQVQRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFKFKBEIRSDNWLASHLGLPPDSLSTYPANYSDDSKIWRRPVEIFRLVSKY 120
Db 61 NACIGTSICKFKFKBEIRSDNWLASHLGLPPDSLSTYPANYSDDSKIWRRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
RESULT 49
ADE26617
ID ADE26617 standard; protein; 182 AA.
XX AC ADE26617;
XX 20-NOV-2003 (first entry)
XX Human PRO polypeptide #86.
XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX Homo sapiens.
XX OS US2003092147-A1.
XX 15-MAY-2003.
XX 11-APR-2002; 2002US-00121051.
XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022391.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.

KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.
 XX
 OS Homo sapiens.
 XX
 XX US2003096386-A1.
 XX
 PD 22-MAY-2003.
 XX
 XX 11-APR-2002; 2002US-00121042.
 PF 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 98WO-US000106.
 PR 08-MAR-1999; 98WO-US005028.
 PR 10-MAR-1999; 98WO-US005190.
 PR 20-APR-1999; 98WO-US008615.
 PR 14-MAY-1999; 98WO-US010733.
 PR 02-JUN-1999; 98WO-US012252.
 PR 01-SEP-1999; 98WO-US020111.
 PR 08-SEP-1999; 98WO-US020594.
 PR 13-SEP-1999; 98WO-US020944.
 PR 15-SEP-1999; 98WO-US021090.
 PR 15-SEP-1999; 98WO-US021547.
 PR 05-OCT-1999; 98WO-US023089.
 PR 28-NOV-1999; 98WO-US028214.
 PR 30-NOV-1999; 98WO-US028313.
 PR 30-NOV-1999; 98WO-US028409.
 PR 01-DEC-1999; 98WO-US028301.
 PR 02-DEC-1999; 98WO-US028634.
 PR 02-DEC-1999; 98WO-US028551.
 PR 02-DEC-1999; 98WO-US028564.
 PR 02-DEC-1999; 98WO-US028565.
 PR 16-DEC-1999; 98WO-US030095.
 PR 20-DEC-1999; 98WO-US030911.
 PR 20-DEC-1999; 98WO-US030999.
 PR 22-DEC-1999; 98WO-US030720.
 PR 30-DEC-1999; 98WO-US031243.
 PR 30-DEC-1999; 98WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 22-FEB-2000; 2000WO-US004342.
 PR 24-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 14-JUN-2001; 2001US-00892636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX
 PA (GETH) GENENTECH INC.
 XX
 XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX
 WPI: 2003-786930/74.
 DR N-PSDB; ADB30903.
 XX
 PT Novel isolated PRO polypeptide useful for treating diabetes, hyper- or
 PT hypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart
 PT attack, various coagulation disorders, tumors.
 XX
 PS Claim 12; Fig 172; 638pp; English.
 XX
 CC The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a

CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 CC of human microvascular endothelial cells, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC proliferation of or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 CC from cartilage are useful for treating sports-related joint problems, PRO
 CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassaemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The
 CC sequence data for this patent is also available in electronic format from
 CC the USPTO website at seqdata.uspto.gov.

XX
 SQ Sequence 182 AA;

Query Match 69.8%; Score 127; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 4e-109;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MEFQGPAAALRPGWLALLLWVSALSCFSLPSSLSLVPQVTSYNGFRTFLGLDKC	60
DB	1	MEFQGPAAALRPGWLALLLWVSALSCFSLPSSLSLVPQVTSYNGFRTFLGLDKC	60
QY	61	NACIGTICKKFKKEIRSONWLASHLGLPDSLLSYPNYSDSKWRPVEIFRLVSKY	120
DB	61	NACIGTICKKFKKEIRSONWLASHLGLPDSLLSYPNYSDSKWRPVEIFRLVSKY	120
QY	121	QNEISDR	127
DB	121	QNEISDR	127

Search completed: June 14, 2004, 08:06:49
 Job time : 61 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 14, 2004, 07:40:44 ; Search time 31.9472 Seconds
(without alignments)
734.069 Million cell updates/sec

Title: US-10-054-988-114_COPY_32_114

Perfect score: 444
Sequence: 1 LPASSLSILVPOVRTSYNFG.....LSYPANYSDDSKWIRPVEIF 83

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : A_Geneseq_29Jan04:*

1: Geneseq1980s:*

2: Geneseq1990s:*

3: Geneseq2000s:*

4: Geneseq2001s:*

5: Geneseq2002s:*

6: Geneseq2003as:*

7: Geneseq2003bs:*

8: Geneseq2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	444	100.0	182	3	AY91393 Human sec
2	444	100.0	182	4	AAU12257 Human PRO
3	444	100.0	182	4	AAB95695 Human pro
4	444	100.0	182	4	AAB48066 Human ext
5	444	100.0	182	6	ABU03563 Angiogene
6	444	100.0	182	6	ABU17701 Novel hum
7	444	100.0	182	6	ABU80955 Human PRO
8	444	100.0	182	6	ABU66655 Human PRO
9	444	100.0	182	6	ABU59736 Novel sec
10	444	100.0	182	6	ABR47459 Breast ca
11	444	100.0	182	6	ABO24926 Human sec
12	444	100.0	182	6	ABU66931 Human sec
13	444	100.0	182	6	ADA45691 Novel hum
14	444	100.0	182	6	ADA76122 Human PRO
15	444	100.0	182	6	ADA18772 Human PRO
16	444	100.0	182	6	ADA61395 Homo sapi
17	444	100.0	182	6	ADB19180 Novel hum
18	444	100.0	182	6	ADB27721 Human PRO
19	444	100.0	182	6	ADA86200 Novel hum
20	444	100.0	182	6	ADB15764 Human PRO
21	444	100.0	182	6	ADA47550 Human PRO
22	444	100.0	182	6	ADA67345 Human PRO
23	444	100.0	182	6	ADB30352 Human PRO
24	444	100.0	182	6	ADA85648 Novel hum
25	444	100.0	182	6	ADA96860 Human PRO

26	444	100.0	182	6	ADA79164 Human PRO
27	444	100.0	182	6	ADA87303 Novel hum
28	444	100.0	182	6	ADB16505 Human PRO
29	444	100.0	182	6	ADA91597 Novel hum
30	444	100.0	182	6	ADB14660 Human PRO
31	444	100.0	182	6	ADB18621 Novel hum
32	444	100.0	182	6	ADA93836 Human PRO
33	444	100.0	182	6	ADB19732 Novel hum
34	444	100.0	182	6	ADB13044 Human PRO
35	444	100.0	182	6	ABO43234 Novel hum
36	444	100.0	182	6	ADA74298 Human PRO
37	444	100.0	182	6	ADB24531 Human PRO
38	444	100.0	182	6	ADA82055 Human PRO
39	444	100.0	182	6	ADA75018 Human PRO
40	444	100.0	182	6	ADA85096 Novel hum
41	444	100.0	182	6	ADA84544 Novel hum
42	444	100.0	182	6	ADB29800 Human PRO
43	444	100.0	182	6	ADA80328 Human PRO
44	444	100.0	182	6	ADA75570 Human PRO
45	444	100.0	182	6	ADA46795 Human PRO
46	444	100.0	182	6	ADB25091 Human PRO
47	444	100.0	182	6	ADA93267 Human PRO
48	444	100.0	182	6	ADB26617 Human PRO
49	444	100.0	182	6	ADB30904 Human PRO
50	444	100.0	182	6	ADA60832 Homo sapi
51	444	100.0	182	6	ADB23979 Human PRO
52	444	100.0	182	6	ADA96308 Human PRO
53	444	100.0	182	6	ADA80880 Human PRO
54	444	100.0	182	6	ADA95756 Human PRO
55	444	100.0	182	6	ADB26085 Human PRO
56	444	100.0	182	6	ADB21550 Novel hum
57	444	100.0	182	7	ADA77329 Human PRO
58	444	100.0	182	7	ADB18069 Human PRO
59	444	100.0	182	7	ADA86752 Novel hum
60	444	100.0	182	7	ADA87855 Novel hum
61	444	100.0	182	7	ADA46243 Novel hum
62	444	100.0	182	7	ADB28273 Human PRO
63	444	100.0	182	7	ADB28825 Human PRO
64	444	100.0	182	7	ADA76777 Human PRO
65	444	100.0	182	7	ADA88407 Novel hum
66	444	100.0	182	7	ADA97412 Human PRO
67	444	100.0	182	7	ADB27169 Human PRO
68	444	100.0	182	7	ADB22102 Novel hum
69	444	100.0	182	7	ADA66793 Human PRO
70	444	100.0	182	7	ADB22654 Human PRO
71	444	100.0	182	7	ADB23427 Human PRO
72	444	100.0	182	7	ADA92149 Novel hum
73	444	100.0	182	7	ADB15212 Human PRO
74	444	100.0	182	7	ADB38464 Novel hum
75	444	100.0	182	7	ADB37912 Novel hum
76	444	100.0	182	7	ADB66384 Novel hum
77	444	100.0	182	7	ADB89464 Human PRO
78	444	100.0	182	7	ADB90196 Human PRO
79	444	100.0	182	7	ADB39297 Novel hum
80	444	100.0	182	7	ADB46920 Novel hum
81	444	100.0	182	7	ADB86527 Human PRO
82	444	100.0	182	7	ADB77132 Novel hum
83	444	100.0	182	7	ADB34289 Human PRO
84	444	100.0	182	7	ADB35393 Human PRO
85	444	100.0	182	7	ADB33737 Human PRO
86	444	100.0	182	7	ADB34841 Human PRO
87	444	100.0	182	7	ADB35945 Human PRO
88	444	100.0	182	7	ADB46340 Novel hum
89	444	100.0	182	7	ADC50213 Novel hum
90	444	100.0	182	7	ADC71760 Novel hum
91	444	100.0	182	7	ADC59739 Novel hum
92	444	100.0	182	7	ADC52746 Novel hum
93	444	100.0	182	7	ADC57100 Novel hum
94	444	100.0	182	7	ADC60291 Novel hum
95	444	100.0	182	7	ADC50766 Novel hum
96	444	100.0	182	7	ADC65293 Human PRO
97	444	100.0	182	7	ADC54391 Novel hum
98	444	100.0	182	7	ADC53352 Novel hum

99 444 100.0 182 7 ADC58875 Adc58875 Novel hum
100 444 100.0 182 7 ADC55753 Adc55753 Novel hum

ALIGNMENTS

RESULT 1
AA91393 ID AA91393 standard; protein; 182 AA.

XX AA91393;
XX 29-JUN-2000 (first entry)
XX Human secreted protein sequence encoded by gene 48 SEQ ID NO:114.
XX Human; secreted protein; diagnosis; neuroprotective; nootropic;
KW neuroleptic; antimanic; cerebroprotective; immunomodulatory;
KW anti-microbial; cardiant; cytostatic; antiinflammatory; haemostatic;
KW anticonvulsant; vasotropic; vaccine; gene therapy; anti-sense therapy;
KW neural; reproductive; immune disorder; immunodeficiency; infection;
KW lymphoma; demyelinating disease; autoimmunity; cancer; inflammation;
KW aneurysm; haemorrhage; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; Tourette syndrome; multiple sclerosis; meningitis;
KW ischaemia; mania; dementia; obsessive compulsive disorder;
KW viral prophylaxis; developmental disorder; sexually-linked disorder;
KW cardiovascular disorder; food additive; preservative.

XX Homo sapiens.

XX WO200011014-A1.

XX 02-MAR-2000.

XX 24-AUG-1999; 99WO-US013330.

XX 25-AUG-1998; 98US-0097917P.

XX 31-AUG-1998; 98US-0098634P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Moore PA, Ruben SM, Olsen HS, Shi Y, Rosen CA, Florence KA;
PI Soppet DR, Lafleur DW, Endress GA, Ebner R, Komatsoulis G, Duan RD;
XX WPI; 2000-224656/19.

XX N-PSDB; AA26328.

XX Claim 11; Page 380-381; 416pp; English.

XX The polynucleotide sequences given in AA26281 to AA26336 encode the

human secreted proteins given in AA91346 to AA91449. The human secreted proteins can have activities based on the tissues and cells they are expressed in. Examples of the activities are: neuroprotective; nootropic; neuroleptic; antimanic; cerebroprotective; immunomodulatory; anti-microbial; cardiant; cytostatic; antiinflammatory; haemostatic; anticonvulsant; and vasotropic. The polynucleotides and proteins may be used to prevent, treat or ameliorate a medical condition, e.g. by protein or gene therapy. Conditions treatable by the proteins of the invention include neural, reproductive, or immune disorders, especially immunodeficiency, infection, lymphomas, demyelinating diseases, auto-immunities, cancer, general microbial infection, inflammation, aneurysms and haemorrhages. Specific examples include: Alzheimer's disease; Parkinson's; Huntington's; Tourette syndrome; multiple sclerosis; meningitis; ischaemia; prostate cancer; mania; dementia; obsessive compulsive disorder and viral prophylaxis. The polynucleotides and proteins can also be used in the detection of disorders associated with the function of the protein, for example, the detection of developmental disorders, sexually-linked disorders, or disorders of the cardiovascular

CC system. They may also be used as food additives or preservatives.
CC AA26272 to AA26280 and AA91345 are sequences used in the
CC exemplification of the present invention
XX SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 3; Length 182;
Best local similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNGRTFLGLDKCNACICTSICKKFFKEIRSDWMLASHGLPP 60
Db 32 LPASSLSLVPQVRTSYNGRTFLGLDKCNACICTSICKKFFKEIRSDWMLASHGLPP 91
QY 61 DLSLSYPANYSDDSKIWPRVEIF 83
Db 92 DLSLSYPANYSDDSKIWPRVEIF 114

RESULT 2

AAU12257

ID AAU12257 standard; protein; 182 AA.

XX AAU12257;

XX 24-OCT-2001 (first entry)

XX Human PRO3743 polypeptide sequence.

XX Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast;
KW prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage;
KW ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte;
KW A-peptide; factor VIIA; gene therapy.

XX Homo sapiens.

XX WO200140466-A2.

XX 07-JUN-2001.

XX 01-DEC-2000; 2000WO-US032678.

XX 01-DEC-1999; 99WO-US028301.

XX 01-DEC-1999; 99WO-US028634.

XX 02-DEC-1999; 99WO-US028551.

XX 02-DEC-1999; 99WO-US028564.

XX 02-DEC-1999; 99WO-US028565.

XX 09-DEC-1999; 99US-0170262P.

XX 16-DEC-1999; 99WO-US030095.

XX 20-DEC-1999; 99WO-US030911.

XX 20-DEC-1999; 99WO-US030999.

XX 30-DEC-1999; 99WO-US031243.

XX 05-JAN-2000; 99WO-US031274.

XX 06-JAN-2000; 2000WO-US000219.

XX 06-JAN-2000; 2000WO-US000277.

XX 11-FEB-2000; 2000WO-US00376.

XX 18-FEB-2000; 2000WO-US004341.

XX 18-FEB-2000; 2000WO-US004342.

XX 22-FEB-2000; 2000WO-US004414.

XX 24-FEB-2000; 2000WO-US004914.

XX 24-FEB-2000; 2000WO-US005004.

XX 21-MAR-2000; 2000WO-US005601.

XX 02-MAR-2000; 2000WO-US005841.

XX 03-MAR-2000; 2000US-0187202P.

XX 10-MAR-2000; 2000WO-US006319.

XX 15-MAR-2000; 2000WO-US006884.

XX 20-MAR-2000; 2000WO-US007377.

XX 21-MAR-2000; 2000WO-US007532.

XX 30-MAR-2000; 2000WO-US008439.

XX 17-MAY-2000; 2000WO-US013705.

XX 22-MAY-2000; 2000WO-US014042.

XX 30-MAY-2000; 2000WO-US014941.

```

PR 02-JUN-2000; 2000WO-US015264.
PR 05-JUN-2000; 2000US-0209832P.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR PA (GETH ) GENENTECH INC.
XX
XX Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;
PI Geriksen ME, Goddard A, Godowski EJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
XX WPI; 2001-408281/43.
DR N-PSDB; AAS21329.
XX
XX Isolated , secretory and transmembrane PRO polypeptide used to detect
PT other PRO polypeptides, link bioactive molecules to cells expressing PRO
PT polypeptides, and detect the presence of mammalian tumors e.g. lung,
PT breast, prostate, cervical.
XX
XX Claim 12; Fig 172; 813pp; English.
XX
XX AAU12172-AAU12446 represent novel human secretory and transmembrane PRO
CC polypeptides. The PRO polypeptides are useful to detect other PRO
CC polypeptides, to link bioactive molecules to cells expressing PRO
CC polypeptides, to modulate biological activities of cells expressing PRO
CC polypeptides, and to detect the presence of mammalian lung, colon,
CC breast, prostate, rectal, cervical or liver tumors by comparing PRO
CC polypeptide expression in a cell sample to that in a control sample. Some
CC of the 2/5 sequences are also useful to stimulate the release of tumour
CC necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or
CC differentiation of chondrocytes, the proliferation or gene expression in
CC pericyte cells, the release of proteoglycans from cartilage, the
CC proliferation of inner ear utricular supporting cells or of T-
CC lymphocytes, the release of a cytokine from peripheral blood monocytes
CC (PBMCs), or the proliferation of endothelial cells. Some of the PRO
CC polypeptides may modulate glucose or free fatty acid uptake by skeletal
CC muscle cells or by adipocytes; or inhibit binding of A-peptide to factor
CC VIIA. The PRO polypeptides can be used in assays to identify molecules
CC involved in binding interactions. The polynucleotides encoding PRO
CC polypeptides can be used to generate probes, antisense RNA/DNA,
CC transgenic or knock out animals and can be used in gene therapy.
XX
XX Sequence 182 AA;
SQ
Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVQVRTSYNFGRTFLGDKCNACIGTICKKFFKEIRSDNWLASHGLGPP 60
Db 32 LPASSLSLVQVRTSYNFGRTFLGDKCNACIGTICKKFFKEIRSDNWLASHGLGPP 91
QY 61 DLSLSYPANYSDSKIWPRVEIF 83
Db 92 DLSLSYPANYSDSKIWPRVEIF 114
RESULT 3
AAB95695
ID AAB95695 standard; protein; 182 AA.
XX
XX AAB95695;
XX
XX 26-JUN-2001 (first entry)
XX
XX Human protein sequence SEQ ID NO:18516.
XX
XX Human; primer; detection; diagnosis; antisense therapy; gene therapy.
XX

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OS Homo sapiens.
XX
XX EP1074617-A2.
XX
XX 07-FEB-2001.
XX
XX 28-JUL-2000; 2000EP-00116126.
XX
XX 29-JUL-1999; 99JP-00248036.
XX
XX 27-AUG-1999; 99JP-00300253.
XX
XX 11-JAN-2000; 2000JP-00118776.
XX
XX 02-MAY-2000; 2000JP-00183767.
XX
XX 09-JUN-2000; 2000JP-00241899.
XX
XX (HELI-) HELIX RES INST.
XX
XX Ota T, Isogai T, Mishikawa T, Hayashi K, Saito K, Yamamoto J;
XX Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
XX WPI; 2001-318749/34.
XX
XX Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
XX Claim 8; SEQ ID NO 18516; 2537pp + Sequence Listing; English.
XX
XX The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dr primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
XX present invention
XX
XX Sequence 182 AA;
SQ
Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVQVRTSYNFGRTFLGDKCNACIGTICKKFFKEIRSDNWLASHGLGPP 60
Db 32 LPASSLSLVQVRTSYNFGRTFLGDKCNACIGTICKKFFKEIRSDNWLASHGLGPP 91
QY 61 DLSLSYPANYSDSKIWPRVEIF 83
Db 92 DLSLSYPANYSDSKIWPRVEIF 114
RESULT 4
AAB48066
ID AAB48066 standard; protein; 182 AA.
XX
XX AAB48066;
XX
XX 19-MAR-2001 (first entry)
XX

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XX DE Human extracellular signaling molecule (EXCS) (ID 5090841CD1).

XX DE Extracellular signaling molecule; EXCS; anti-inflammatory; human;

XX DE immunosuppressive; cytostatic; neuroprotective; gastrointestinal;

XX DE virulence; antibacterial; anti-HIV; human immunodeficiency virus;

XX DE antifertility; cerebroprotective; neurotropic; antitumor; antifungal;

XX DE anticonvulsant; tranquilizer; neuroleptic; vasotropic; gynecological;

XX DE keratolytic; protozoicide; gene therapy.

XX OS Homo sapiens.

XX PN W2000070349-A2.

XX PD 23-NOV-2000.

XX PF 19-MAY-2000; 2000WO-US013975.

XX PR 19-MAY-1999; 99US-0134949P.

XX PR 15-JUL-1999; 99US-0144270P.

XX PR 30-JUL-1999; 99US-0146700P.

XX PR 04-OCT-1999; 99US-0157508P.

XX PR (INCY-) INCYTE GENOMICS INC.

XX PA Tang YT, Yue H, Lal P, Burford N, Bandman O, Baughn MR;

XX PI Azimzai Y, Lu DM, Patterson C;

XX PI WPI; 2001-025022-/03.

XX DR N-PSDB; AAC84302.

XX XX New human extracellular signaling nucleic acids and polypeptides useful

XX PT for diagnosing, treating and preventing infections and gastrointestinal,

XX PT neurological, reproductive, and autoimmune/inflammatory disorders.

XX PS Claim 1; Page 88-89; 114pp; English.

XX CC The invention provides human extracellular signaling molecules (EXCS) and

XX CC polynucleotides which identify and encode EXCS. EXCS can be expressed by

XX CC standard recombinant methodology. The amino acid and nucleic acid

XX CC sequences of EXCS are useful for diagnosing, treating and preventing

XX CC infections and gastrointestinal (peptic ulcer, dysphagia, pancreatitis),

XX CC neurological (e.g. epilepsy, ischemic cerebrovascular disease, stroke),

XX CC reproductive (infertility, ovulatory defects, endometriosis), autoimmune

XX CC (inflammatory (actinic keratosis, acquired immunodeficiency syndrome

XX CC (AIDS), Addison's disease), and cell proliferative disorders including

XX CC cancers (of the breast, adrenal gland, bone). They may also be used to

XX CC treat fatal familial insomnia, nutritional and metabolic diseases of the

XX CC nervous system, myopathies, mental disorders (anxiety, schizophrenia,

XX CC mood), as well as infections caused by parasites (malaria, leishmania,

XX CC trypanosoma), viral (adenovirus, coronavirus, flavivirus), bacterial

XX CC (e.g. pneumococcus, staphylococcus, bacillus), and fungal (aspergillus,

XX CC blastomycetes, dermatophytes) agents. The nucleic acids, polypeptides,

XX CC antagonists, agonists, pharmaceutical compositions, and antibodies may

XX CC also be used for treating or preventing disorders associated with

XX CC increased or decreased expression or activity of EXCS. EXCS

XX CC polynucleotides may also be used to detect and quantify gene expression

XX CC in biopsied tissues in which expression of EXCS may be correlated with

XX CC the disease, to determine presence or excess expression of EXCS, to

XX CC monitor regulation of EXCS levels during therapeutic intervention, to

XX CC detect the presence of associated disorders, as targets in microarray, to

XX CC generate hybridization probes, and to detect differences in gene

XX CC sequences among normal, carrier or affected individuals. Antibodies may

XX CC also be used in diagnosing disorders, in monitoring patients being

XX CC treated with EXCS agonists, antagonists or inhibitors. Sequences AAB48057

XX CC -B48082 represent the EXCS of the invention

XX CC Sequence 182 AA;

Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVATSYNPGRTFLGLDKCNACICTSICKKFFKBEIRSDNWLASHGLPP 60

DB 32 LPASSLSLVPQVATSYNPGRTFLGLDKCNACICTSICKKFFKBEIRSDNWLASHGLPP 91

QY 61 DSLISYPANYSDDSKIWRPVEIF 83

DB 92 DSLISYPANYSDDSKIWRPVEIF 114

RESULT 5

ABU03563

ID ABU03563 standard; protein; 182 AA.

XX AC ABU03563;

DT 21-JAN-2003 (first entry)

XX XX Angiogenesis-associated human protein sequence #108.

XX Human; angiogenesis-associated transcript; angiogenesis;

XX Human; angiogenesis-associated disease; cancer; cytostatic.

XX OS Homo sapiens.

XX XX W0200279492-A2.

XX PD 10-OCT-2002.

XX PF 14-FEB-2002; 2002WO-US004915.

XX PR 14-FEB-2001; 2001US-00784356.

XX PR 22-FEB-2001; 2001US-00791390.

XX PR 19-APR-2001; 2001US-0285475P.

XX PR 03-AUG-2001; 2001US-0310025P.

XX PR 13-NOV-2001; 2001US-0350666P.

XX PR 23-NOV-2001; 2001US-0334244P.

XX PA (BOSB-) EOS BIOTECHNOLOGY INC.

XX XX Murray R, Glynn R, Watson SR, Aziz N;

XX WPI; 2003-040681/03.

XX N-PSDB; ABX08847.

XX PT Detecting angiogenesis-associated transcript in a cell for diagnosing and

XX PT treating cancer by contacting a sample with a polynucleotide that

XX PT exhibits changes in expression level as a function of time in tissue

XX PT undergoing angiogenesis.

XX PS Example 2; Page 282; 291pp; English.

XX CC The present invention relates to methods and compositions for detecting

XX CC an angiogenesis-associated transcript in a cell in a patient. The method

XX CC involves contacting a biological sample from the patient with a

XX CC polynucleotide that selectively hybridizes to a sequence at least 80%

XX CC identical to any of the angiogenesis-associated human polynucleotide

XX CC sequences given in the specification. These angiogenesis-associated

XX CC polynucleotide sequences comprise genes that exhibit changes in

XX CC expression levels as a function of time in tissue undergoing

XX CC angiogenesis. The method and the polynucleotide sequences of the

XX CC invention are useful for diagnosing and treating angiogenesis and

XX CC angiogenesis-associated diseases e.g. cancer. The polynucleotide

XX CC sequences are also useful in the gene therapy of such disorders. The

XX CC angiogenesis-associated proteins encoded by the polynucleotide sequences

XX CC are useful as a vaccine for therapeutic and prophylactic immunisation.

XX CC ABU03456-ABU03569 represent angiogenesis-associated protein sequences

XX CC Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASLSLSPVQVETSYNFGRTFLGLKCNACIGTSCKFFKEIRSDNWLASHGLPP 60
Db 32 LPASLSLSPVQVETSYNFGRTFLGLKCNACIGTSCKFFKEIRSDNWLASHGLPP 91

QY 61 DLSLSYPANTSDSKIKRPVEIF 83
Db 92 DLSLSYPANTSDSKIKRPVEIF 114

RESULT 6

ABO17701
ID ABO17701 standard; protein; 182 AA.

XX AC ABO17701;

XX DT 26-AUG-2003 (first entry)

XX DE Novel human secreted and transmembrane protein PRO3743.

XX KW Human; secreted and transmembrane protein; PRO; antiinflammatory;
KW arteriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic;
KW antidiabetic; gene therapy; tumour necrosis factor (TNF)-alpha release;
KW TNF-alpha release; cell proliferation; cell differentiation;
KW gene expression modulator; proteoglycan release; cytokine release;
KW tumour; inflammatory disease; organ failure; atherosclerosis;
KW cardiac injury; infertility; birth defect; premature aging; AIDS;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor;
KW bioreactor; tissue typing.

XX OS Homo sapiens.

XX PN US2003032156-A1.

XX PD 13-FEB-2003.

XX PF 06-MAY-2002; 2002US-00140474.

XX PR 31-MAR-1997; 99WO-US005230.

PR 12-JUN-1998; 98WO-US012456.

PR 24-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.

PR 14-SEP-1998; 98WO-US019177.

PR 16-SEP-1998; 98WO-US019330.

PR 17-SEP-1998; 98WO-US019437.

PR 07-OCT-1998; 98WO-US021141.

PR 23-OCT-1998; 98WO-US022991.

PR 20-NOV-1998; 98WO-US022992.

PR 01-DEC-1998; 98WO-US024855.

PR 05-JAN-1999; 98WO-US025138.

PR 08-MAR-1999; 99WO-US005028.

PR 10-MAR-1999; 99WO-US005190.

PR 20-APR-1999; 99WO-US006615.

PR 14-MAY-1999; 99WO-US010733.

PR 02-JUN-1999; 99WO-US012252.

PR 01-SEP-1999; 99WO-US020111.

PR 08-SEP-1999; 99WO-US020594.

PR 13-SEP-1999; 99WO-US020944.

PR 15-SEP-1999; 99WO-US021090.

PR 15-SEP-1999; 99WO-US021547.

PR 05-OCT-1999; 99WO-US023389.

PR 29-NOV-1999; 99WO-US028214.

PR 30-NOV-1999; 99WO-US028313.

PR 30-NOV-1999; 99WO-US028409.

PR 01-DEC-1999; 99WO-US028301.

PR 01-DEC-1999; 99WO-US028634.

PR 02-DEC-1999; 99WO-US028551.

PR 02-DEC-1999; 99WO-US028564.

PR 02-DEC-1999; 99WO-US028565.

PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 22-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 22-FEB-2000; 2000WO-US004342.
PR 24-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001US-00866034.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI: 2003-341980/32.
DR N-PSDB; ACD23938.
DR

XX New secreted and transmembrane PRO nucleic acids, for treating
PT inflammation, organ failure, atherosclerosis, cardiac injury,
PT infertility, birth defects, premature aging, acquired immunodeficiency
PT syndrome (AIDS), or cancer.
XX Claim 12; Fig 172; 660pp; English.
XX
CC The invention describes an isolated nucleic acid (I) comprising, or which
CC has 80 % sequence identity to, or the full-length coding sequence of, one
CC of 275 nucleotide sequences, and which encodes a corresponding
CC polypeptide selected from 275 amino acid sequences, where all sequences
CC are given in the specification. The polypeptide encoded by (I) is used to
CC detect PRO polypeptides, link a bioactive molecule to a cell expressing a
CC PRO polypeptide, modulate a biological activity of a cell, stimulate the
CC release of tumour necrosis factor (TNF)-alpha from human blood, modulate
CC the uptake of glucose or free fatty acid by cells, stimulate or inhibit
CC the proliferation or differentiation of cells or gene expression,
CC stimulate the release of proteoglycans, stimulate the release of cytokine
CC from peripheral blood mononuclear cells, inhibit the binding of a peptide
CC to factor VIIA, or detect the presence of tumour in a mammal. The nucleic
CC acid and polypeptide encoded by it, are useful for treating inflammatory
CC diseases, organ failure, atherosclerosis, cardiac injury, infertility,
CC birth defects, premature aging, acquired immunodeficiency syndrome
CC (AIDS), cancer, or diabetic complications. The nucleic acid is useful as
CC hybridisation probes, in chromosome and gene mapping, and in generating
CC antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,
CC diagnostics, biosensors or bioreactors. Both are useful in tissue typing.
CC This is the amino acid sequence of a novel human secreted and
CC transmembrane PRO polypeptide
XX
SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLLVPQVTSYNGRTFLGDKCNACIGTSICKKFFKEIRSDNWLASHGLPP 60
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||
QY 32 LPASSLSLLVPQVTSYNGRTFLGDKCNACIGTSICKKFFKEIRSDNWLASHGLPP 91
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||
QY 61 DLSLYPANYSDSKIRPVEIF 83
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||
QY 92 DLSLYPANYSDSKIRPVEIF 114
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||
RESULT 7
ABU80955
ID ABU80955 standard; protein; 182 AA.
AC
AC ABU80955;
DT 23-JUN-2003 (first entry)
XX
DE Human PRO polypeptide #86.
XX
KW Human; PRO polypeptide; secreted and transmembrane protein;
KW anti-PRO antibody; diagnostic assay; gene expression; diabetes;
KW bone disorder; cartilage disorder; rheumatoid arthritis; obesity;
KW sports injury; osteoarthritis; hyper-insulinaemia; hypo-insulinaemia;
KW hearing loss; coagulation disorder; stroke; heart attack; cardiac;
KW antidiabetic; anorectic; vulnerable; antithrombotic; osteopathic;
KW antirheumatic; auditory; cerebroprotective; angiogenic.
XX
OS Homo sapiens.
XX
XX US20030043111-A1.
XX
PD 02-JAN-2003.
XX
PF 19-DEC-2001; 2001US-00028072.
XX
XX 18-JUN-1997; 97US-0049911P.
PR 26-AUG-1997; 97US-0056974P.
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 19-SEP-1997; 97US-0059352P.
PR 19-SEP-1997; 97US-0059588P.
PR 24-SEP-1997; 97US-0059836P.
PR 17-OCT-1997; 97US-0062250P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 17-OCT-1997; 97US-0063755P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063082P.
PR 24-OCT-1997; 97US-0063127P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063561P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063733P.
PR 29-OCT-1997; 97US-0063735P.
PR 03-NOV-1997; 97US-0064388P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 11-DEC-1997; 97US-0069212P.
PR 11-DEC-1997; 97US-0069278P.
PR 11-DEC-1997; 97US-0069334P.
PR 16-DEC-1997; 97US-0069694P.
PR 23-JAN-1998; 98US-0072320P.
PR 04-FEB-1998; 98US-0073612P.
PR 09-FEB-1998; 98US-0074086P.
PR 09-FEB-1998; 98US-0074092P.
PR 12-MAR-1998; 98US-0077791P.
PR 20-MAR-1998; 98US-0078910P.
PR 25-MAR-1998; 98US-0079294P.
PR 27-MAR-1998; 98US-0079663P.
PR 31-MAR-1998; 98US-0080165P.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025106.
PR 05-JAN-1999; 99WO-US000108.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.

PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US005094.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 XX
 PA (GETH) GENENTECH INC.
 XX Baker KP, Beresini M, Deforje L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-352836/33.
 DR N-PSDB; ACA67079.
 XX
 PT New isolated PRO polypeptide useful for treating diabetes, rheumatoid
 PT arthritis, sports injuries, obesity, hearing loss in mammals, stroke, or
 PT heart attack.
 XX
 PS Claim 12; Fig 172; 643pp; English.
 XX
 CC The present invention relates to the isolation of novel human PRO
 CC polypeptides, and the polynucleotide sequences encoding them. The PRO
 CC polypeptides are secreted and transmembrane proteins. The PRO
 CC polypeptides and polynucleotides are useful for preparing a medicament
 CC useful in the treatment of diabetes, bone and/or cartilage disorders
 CC (e.g. rheumatoid arthritis, sports injuries, osteoarthritis), obesity,
 CC hyper- or hypo-insulinaemia, hearing loss, and coagulation disorders
 CC (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic
 CC assays for PRO, by detecting its expression in specific cells, tissues or
 CC serum, and for affinity purification of PRO from recombinant cell culture
 CC or natural sources. ABU081144 represent the human PRO
 CC polypeptides of the invention. Note: The sequence data for this patent
 CC was obtained in electronic format directly from the USPTO web site at
 CC seqdata.uspto.gov/psipsDIDentry.html
 XX
 SQ Sequence 182 AA;
 Query Match 100.0%; Score 444; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 1.6e-46;
 Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LPASSLSLVQVRYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHGLPP 60
 Db 32 LPASSLSLVQVRYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHGLPP 91
 QY 61 DSLSYSPANYSDSKTRWPVEIF 83
 Db 92 DSLSYSPANYSDSKTRWPVEIF 114
 RESULT 8

ABU66655
 ID ABU66655 standard; protein; 182 AA.
 XX AC ABU66655;
 XX DT 23-MAY-2003 (first entry)
 XX DE Human PRO polypeptide #86.
 XX KW Human; PRO polypeptide; secreted and transmembrane protein;
 KW tumour necrosis factor-alpha; TNF-alpha; blood; proliferation;
 KW differentiation; chondrocyte; tumour; genetic disorder; cytostatic.
 XX OS Homo sapiens.
 XX PN US2003036180-A1.
 XX PD 20-FEB-2003.
 XX PF 09-MAY-2002; 2002US-00143114.
 XX 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005094.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.

PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013709.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023523.
PR 24-AUG-2000; 2000WO-US023528.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
PA (GETH) GENENTECH INC.
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski FJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
DR WPI: 2003-332040/31.
XX N-PSDB; ACAC3688.
DR
XX
PT New secreted and transmembrane PRO nucleic acids, useful for gene
PT therapy, in chromosome and gene mapping, as chromosome markers, in tissue
PT typing, and in chromosome identification.
XX
PS Claim 12; Fig 172; 560pp; English.
XX
CC The present invention relates to the isolation of novel human PRO
CC polypeptides, and the polynucleotide sequences encoding them. The PRO
CC polypeptides are secreted and transmembrane proteins. The PRO
CC polypeptides are useful for detecting other PRO polypeptides, for linking
CC bioactive molecules to cells expressing PRO polypeptides, for modulating
CC biological activities of cells expressing PRO polypeptides, and for
CC identifying agonists or antagonists. The PRO polypeptides are useful for
CC for stimulating the release of tumour necrosis factor (TNF)-alpha from
CC human blood, for stimulating the proliferation or differentiation of
CC chondrocytes, and detecting the presence of tumours. The polynucleotide

CC sequences encoding PRO polypeptides are useful as hybridisation probes,
CC in chromosome and gene mapping, in the generation of antisense RNA and
CC DNA, in the preparation of PRO polypeptides, for generating transgenic
CC animals or knockout animals, for the genetic analysis of individuals with
CC genetic disorders, and in gene therapy. AB066570-AB066844 represent the
CC human PRO polypeptides of the invention. Note: The sequence data for this
CC patent was obtained in electronic format directly from the USPTO web site
CC at segdata.uspto.gov/psipsDIDEntry.html
XX
SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVRSYNEGRFLGDKCNACIGTSICKKPKKEIRSDNWLAHGLPP 60
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||
32 LPASSLSLVPQVRSYNEGRFLGDKCNACIGTSICKKPKKEIRSDNWLAHGLPP 91
QY 61 DSLSYPANYSDDSKIWREVEIF 83
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||
92 DSLSYPANYSDDSKIWREVEIF 114
RESULT 9
ABU59736
ID ABU59736 standard; protein; 182 AA.
XX
AC ABU59736;
XX
DT 13-MAY-2003 (first entry)
XX
DE Novel secreted and transmembrane protein PRO3743.
XX
KW Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing;
KW cardiac insufficiency disorder; cancer; tumour; immune response;
KW adrenal cortical capillary endothelial growth; c-fos induction;
KW vascular endothelial growth factor inhibition; VEGF inhibition;
KW endothelial cell growth inhibitor; T-lymphocytes stimulation;
KW retinal neurons cell survival; rod photoreceptor cell survival;
KW retinal disorder; retinitis pigmentosa; kidney disorder;
KW mammalian kidney mesangial cell proliferation; Berger disease;
KW dermatitis; herpeticiformis; Crohn's disease; chondrocyte proliferation;
KW chondrocyte redifferentiation; sports injury; arthritis.
XX
OS Homo sapiens.
XX
PN US2003017563-A1.
XX
PD 23-JAN-2003.
XX
PF 07-MAY-2002; 2002US-00140808.
XX
XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.

PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 05-JAN-2000; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US000365.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 10-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014842.
PR 02-JUN-2000; 2000WO-US014941.
PR 28-JUL-2000; 2000WO-US015264.
PR 11-AUG-2000; 2000WO-US020710.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030973.
PR 31-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001US-00866034.
PR 01-JUN-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 05-JUN-2001; 2001WO-US017800.
PR 14-JUN-2001; 2001US-00884503.
PR 19-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 21-JUN-2001; 2001WO-US019692.
PR 22-JUN-2001; 2001US-00887879.
PR 29-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.

PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX (GETH) GENENTECH INC.
PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski RJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-148238/14.
DR N-PSDB; ABX89226.
XX Two hundred and seventy five nucleic acids encoding PRO polypeptides,
PT useful for treating pericyte-associated tumors, diabetes and various bone
PT and/or cartilage disorders, e.g. arthritis.
XX Claim 12; Fig 172; 659pp; English.
XX The invention describes an isolated human PRO polypeptide. The PRO
CC polypeptides are useful in detecting PRO polypeptides in a sample, in
CC linking a bioactive molecule to a cell expressing a PRO polypeptide, and
CC in modulating at least one biological activity of a cell expressing a PRO
CC polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus
CC useful for treating cardiac insufficiency disorders. PRO1154 and PRO1186
CC stimulate adrenal cortical capillary endothelial growth, and PRO536,
CC PRO943, PRO828, PRO826, PRO1068 or PRO535, PRO826, PRO819, PRO1126,
CC PRO1360 and PRO1387 induce c-fos in endothelial cells, and are thus
CC useful for treating conditions or disorders where angiogenesis would be
CC beneficial, e.g. wound healing and antagonist of this polypeptide are
CC useful for treating cancerous tumors. PRO812 inhibits vascular
CC endothelial growth factor (VEGF) stimulated proliferation of endothelial
CC cells and is thus useful for inhibiting endothelial cell growth in
CC mammals which would be beneficial in inhibiting tumour growth. PRO826,
CC PRO1068, PRO1184, PRO1346 and PRO1375 stimulate proliferation of
CC stimulated T-lymphocytes and are therapeutically useful for enhancing
CC immune response. PRO828, PRO826, PRO1068 or PRO1132 enhance survival of
CC retinal neurons cells (PRO1132 is also enhances survival/proliferation of
CC rod photoreceptor cells) and therefore are useful for treating retinal
CC disorders of injuries, e.g. retinitis pigmentosa, AMD. PRO819, PRO813
CC and PRO1066 induce proliferation of mammalian kidney mesangial cells,
CC and therefore are useful for treating kidney disorders associated with
CC decreased mesangial cell function such as Berger disease or other
CC nephropathies associated with dermatitis, herpeticiformis or Crohn's
CC disease. PRO1310, PRO844, PRO1312, PRO1192 and PRO1387 induce the
CC proliferation and/or redifferentiation of chondrocytes in culture and are
CC thus useful for treating sports injuries, and arthritis. This is the
CC amino acid sequence of a novel human PRO protein

XX SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 LPASSLSLLVPQVTSYNGRTFLGLDKNCACIGTSICKFFKEIRSDNWLASHGLGPP 60
Db 32 LPASSLSLLVPQVTSYNGRTFLGLDKNCACIGTSICKFFKEIRSDNWLASHGLGPP 91
Qy 61 DLSLSYPANYSDDSKIWVPEIF 83
Db 92 DLSLSYPANYSDDSKIWVPEIF 114
RESULT 10
ABR47459
ID ABR47459 standard; protein; 182 AA.
XX
AC ABR47459;
XX

DT 12-JUN-2003 (first entry)
 DE Breast cancer associated protein sequence SEQ ID NO:150.
 XX Human; breast cancer; cytostatic; gene therapy.
 KW Homo sapiens.
 OS WO2003004989-A2.
 PN 16-JAN-2003.
 XX 21-JUN-2002; 2002WO-US019669.
 XX 21-JUN-2001; 2001US-0399887P.
 PR 27-JUN-2001; 2001US-0301572P.
 PR 18-JUL-2001; 2001US-0306501P.
 PR 25-SEP-2001; 2001US-0325002P.
 PR 05-MAR-2002; 2002US-0362585P.
 PR 14-MAY-2002; 2002US-0380391P.
 XX (MILL-) MILLENIUM PHARM INC.
 PA Lillie J, Gannavarapu M, Giatt K, Hoersh S, Kamatkar S,
 PI Mertens M, Monahan JE, Myer V, Wang Y, Xu Y, Zhao X, Meyers RE;
 PI Bast RC, Hortobagyi GN, Pusztai L, Meric P, Sahin A, Mills GB;
 XX WPI; 2003-2-0381/20.
 DR N-PSDB; ACCS0151.
 XX Breast cancer diagnosis or treatment by comparing the level of expression
 PT of a marker in a patient sample with that in the control non-breast
 PT cancer sample.
 XX Claim 1; SEQ ID NO 150; 128bp; English.
 XX The present invention describes a method for assessing whether a patient
 CC is afflicted with breast cancer. The method comprises comparing the level
 CC of expression of a marker (gene/polypeptide see ACCS0076 to ACCS0334 and
 CC ABR47386 to ABR47632) in a patient sample and the normal level of
 CC expression of the marker in a control non-breast cancer sample, where a
 CC significant increase in the level of expression of the marker in the
 CC patient sample and the normal level is an indication that the patient is
 CC afflicted with breast cancer. The breast cancer associated sequences from
 CC the present invention have cytostatic activities and can be used in gene
 CC therapy. The method is useful for diagnosing and treating breast cancer.
 CC N.B. The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 182 AA;
 SQ
 Query Match 100.0%; Score 444; DB 6; Length 182;
 Best local Similarity 100.0%; Pred. NO. 1.6e-46;
 Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LPASSLSLLVPOVRTSNFQRTFLGDKCNACIGTSCIKKPFKEIRSDNWLASHGLPP 60
 Db 32 LPASSLSLLVPOVRTSNFQRTFLGDKCNACIGTSCIKKPFKEIRSDNWLASHGLPP 91
 QY 61 DSLLSYPANYSDSDSKWRPVEIF 83
 Db 92 DSLLSYPANYSDSDSKWRPVEIF 114
 RESULT 11
 ID ABO24926
 XX ABO24926 standard; protein; 182 AA.
 AC ABO24926;
 XX 05-SEP-2003 (first entry)
 DT
 XX

DE Human secreted/transmembrane protein (PRO) #86.
 XX Human; PRO; secreted protein; transmembrane protein; tumour; cytostatic;
 KW gene therapy; tumour necrosis factor-alpha; TNF-alpha; blood;
 KW proteoglycan; cartilage; cytokine; peripheral blood mononuclear cell;
 KW PMBC; glucose uptake; PFA; skeletal muscle cell; adipocyte cell;
 KW chondrocyte cell proliferation; chondrocyte cell differentiation;
 KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell; A-peptide; factor VIIA.
 XX Homo sapiens.
 OS US2003036179-A1.
 PN 20-FEB-2003.
 XX 10-MAY-2002; 2002US-00142431.
 PD 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.

ER 20-MAR-2000; 20COWO-US007377.
ER 21-MAR-2000; 20COWO-US007532.
ER 30-MAR-2000; 20COWO-US008439.
PR 17-MAY-2000; 20COWO-US013705.
PR 22-MAY-2000; 20COWO-US014042.
PR 30-MAY-2000; 20COWO-US014941.
PR 02-JUN-2000; 20COWO-US015264.
PR 28-JUL-2000; 20COWO-US020710.
PR 11-AUG-2000; 20COWO-US022031.
PR 23-AUG-2000; 20COWO-US023532.
PR 24-AUG-2000; 20COWO-US023328.
PR 08-NOV-2000; 20COWO-US030952.
PR 10-NOV-2000; 20COWO-US030873.
PR 01-DEC-2000; 20COWO-US032678.
PR 20-DEC-2000; 20COWO-US032678.
PR 20-DEC-2000; 20COWO-US034956.
PR 28-FEB-2001; 20COWO-US034956.
PR 28-FEB-2001; 20COWO-US036520.
PR 01-MAR-2001; 20COWO-US036666.
PR 09-MAR-2001; 20COWO-US037006.
PR 14-MAR-2001; 20COWO-US038689.
PR 22-MAR-2001; 20COWO-US016744.
PR 05-APR-2001; 20COWO-US028366.
PR 10-MAY-2001; 20COWO-US0284208.
PR 10-MAY-2001; 20COWO-US0284208.
PR 18-MAY-2001; 20COWO-US0284208.
PR 25-MAY-2001; 20COWO-US0284208.
PR 25-MAY-2001; 20COWO-US0284208.
PR 01-JUN-2001; 20COWO-US017092.
PR 01-JUN-2001; 20COWO-US017092.
PR 01-JUN-2001; 20COWO-US017092.
PR 05-JUN-2001; 20COWO-US017092.
PR 14-JUN-2001; 20COWO-US017092.
PR 19-JUN-2001; 20COWO-US017092.
PR 20-JUN-2001; 20COWO-US017092.
PR 21-JUN-2001; 20COWO-US017092.
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PR 29-JUN-2001; 20COWO-US021066.
PR 09-JUL-2001; 20COWO-US021735.
PR 18-JUL-2001; 20COWO-US021735.
PR 06-AUG-2001; 20COWO-US024419.
PR 09-AUG-2001; 20COWO-US024419.
PR 16-AUG-2001; 20COWO-US027796.
PR 19-DEC-2001; 20COWO-US031836.
PR 20-DEC-2001; 20COWO-US028072.

XX PA
XX PA
XX PI
PI PI
PI PI
PI PI
XX XX
XX XX
PS PS
CC CC

(GETH) GENENTECH INC.

Baker KP, Berezini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CX, Wood WI, Zhang Z;
WPI; 2003-466355/44.
N-PSDB; ACD41880.

New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PRO4978, useful in molecular biology, chromosome and gene mapping, in
generating antisense RNA and DNA, and in gene therapy.

Claim 12; Fig 172; 659pp; English.

The invention relates to an isolated nucleic acid comprising at least 80%
sequence identity to a PRO (secreted and transmembrane protein) cDNA
comprising a nucleic acid (a) encoding a PRO polypeptide, or its
extracellular domain (with or without its associated signal peptide),
which comprises any of the 275 120-850 residue amino acid sequences,
given in the specification; (b) comprising any of the 275 300-3500
nucleotide sequences, given in the specification; or (c) comprising the
full-length coding sequence of the nucleotide sequences given in the
specification, or of the DNA deposited under any of the American Type
Culture Collection (ATCC) Accession Numbers listed in the specification.
Also included are a vector comprising the novel nucleic acid, a host cell
comprising the vector, producing a PRO polypeptide, the isolated PRO
polypeptides detailed above, a chimeric molecule comprising the PRO

polypeptide of fused to a heterologous amino acid sequence, an anti-PRO antibody, detecting a PRO polypeptide in a sample suspected of containing the PRO polypeptide, linking a bioactive molecule to a cell expressing a PRO polypeptide, modulating at least one biological activity of a cell expressing a PRO polypeptide, stimulating the release of tumour necrosis factor- α (TNF- α) from human blood, (or proteoglycans from cartilage or cytokine from peripheral blood mononuclear cells (PBMC)), modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, stimulating the proliferation or differentiation of chondrocyte cells (or proliferation of or gene expression in pericyte cells), stimulating the proliferation of inner ear utricular supporting cells (or of T-lymphocyte cells, or of endothelial cells), inhibiting the binding of A-peptide to factor VIIA, or differentiation of adipocyte cells, detecting the presence of a tumour in a mammal and an oligonucleotide probe derived from any of the nucleotide sequences given in the specification. The polynucleotide is useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy. The polynucleotide may also be used in preparing PRO polypeptides by recombinant techniques, and in generating either transgenic animals or knock-out animals which, in turn, are useful in the development and screening of therapeutically useful reagents. The PRO polypeptide or the antibody is used in preparing a medicament for treating a condition responsive to the polypeptide or antibody, such as tumours, and in various diagnostic assays. The present sequence represents a PRO polypeptide

Sequence 182 AA:

```

Query Match      100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0

Qy 1 LPASSLSLPVQVTSNFGRTFGLDKNCACICTSICKFFKEIRSDNWLASHLGPP 60
    |||||
Db 32 LPASSLSLPVQVTSNFGRTFGLDKNCACICTSICKFFKEIRSDNWLASHLGPP 91
    |||||

Qy 61 DILLSYPANTSDDSKIKWRPVEIF 83
    |||||
Db 92 DILLSYPANTSDDSKIKWRPVEIF 114
    |||||

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RESULT 12

ABU666931
ID ABU666931 standard; protein; 182 AA.

AC ABU66931:

DT	27-MAY-2003	(first entry)
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DE Human secreted/transmembrane, PRO. protein SEQ ID 172.

Human; secreted protein; transmembrane protein; PRO;
inflammatory disease; organ failure; atherosclerosis; cardiac injury;
infertility; birth defects; premature aging; AIDS; biosensor;
acquired immunodeficiency syndrome; cancer; diabetic complication;
bioreactor; tumour

XX Homo sapiens

XX PN US2003032155-A1.

XX
PD 13-FEB-2003

03-MAY-2002: 2002US-00137865.

XX
PR 31-MAR-1997. 07W0-IIS005230

PR	31-MAR-1997;	97WO-US005230.
PR	12-JUN-1998:	98WO-US012456

ER 12-JUN-1998; 98WO-US012436;
PR 14-JUL-1998; 98WO-US014552;

PR 28-AUG-1998; 98WO-US017888.

PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98WO-US019093.

PR 14-SEP-1998; 98WO-US019094.

PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 98WO-US000106.
 PR 08-MAR-1999; 98WO-US005028.
 PR 10-MAR-1999; 98WO-US005190.
 PR 20-APR-1999; 98WO-US008615.
 PR 14-MAY-1999; 98WO-US010733.
 PR 02-JUN-1999; 98WO-US012252.
 PR 01-SEP-1999; 98WO-US020111.
 PR 08-SEP-1999; 98WO-US020594.
 PR 13-SEP-1999; 98WO-US020944.
 PR 15-SEP-1999; 98WO-US021090.
 PR 15-SEP-1999; 98WO-US021547.
 PR 05-OCT-1999; 98WO-US023089.
 PR 29-NOV-1999; 98WO-US028214.
 PR 30-NOV-1999; 98WO-US028313.
 PR 01-DEC-1999; 98WO-US028409.
 PR 01-DEC-1999; 98WO-US028301.
 PR 02-DEC-1999; 98WO-US028634.
 PR 02-DEC-1999; 98WO-US028551.
 PR 02-DEC-1999; 98WO-US028564.
 PR 16-DEC-1999; 98WO-US028565.
 PR 20-DEC-1999; 98WO-US030095.
 PR 20-DEC-1999; 98WO-US030911.
 PR 22-DEC-1999; 98WO-US030999.
 PR 22-DEC-1999; 98WO-US030720.
 PR 30-DEC-1999; 98WO-US031243.
 PR 30-DEC-1999; 98WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 11-FEB-2000; 2000WO-US000376.
 PR 18-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.

PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Geritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX MPI; 2003-331925/31.

DR N-PSDB; ACA04109.
 XX

PT New secreted and transmembrane nucleic acids and polypeptides, designated
 PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
 PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
 PT cancer.

PS Claim 12; Fig 172; 659pp; English.

XX The invention relates to an isolated nucleic acid comprising, or which is
 CC at least 80% identical to, or the full-length coding sequence of, any of
 CC the 275 nucleotide sequences, encoding the corresponding PRO polypeptide
 CC (one of 275 secreted or transmembrane proteins). The nucleic acid further
 CC comprises the full-length coding sequence of the DNA deposited under
 CC American Type Culture Collection (ATCC) accession number in a list given
 CC in the specification. Also included are vectors and host cells for
 CC producing PRO proteins, PRO fusion proteins, anti-PRO antibodies, PRO
 CC extracellular domains and mature sequences, methods of detecting PRO
 CC proteins, methods for stimulating the release of TNF-alpha (tumour
 CC necrosis factor alpha) from human blood, and the proliferation of
 CC differentiation of chondrocyte cells, the proliferation of, or gene
 CC expression in pericyte cells, the release or proteoglycans from
 CC cartilage, proliferation of inner ear articular supporting cells, the
 CC proliferation of T-lymphocyte cells, the release of a cytokine from
 CC peripheral blood mononuclear cells (PBMC), or the proliferation of
 CC endothelial cells), a method for modulating the uptake of glucose or free
 CC fatty acid (FFA) by skeletal muscle cells, a method for inhibiting the
 CC binding of A-peptide to factor VIIA, or the differentiation of adipocyte
 CC cells, a method for detecting the presence of a tumour in a mammal and an
 CC oligonucleotide probe derived from any of the nucleotide sequences cited
 CC above. The nucleic acids and polypeptides are useful for treating
 CC inflammatory diseases, organ failure, atherosclerosis, cardiac injury,
 CC infertility, birth defects, premature aging, AIDS (acquired
 CC immunodeficiency syndrome), cancer, or diabetic complications. The
 CC nucleic acids are useful as hybridisation probes, in chromosome and gene
 CC mapping, and in generating antisense RNA or DNA. The polypeptides are
 CC useful as pharmaceuticals, diagnostics, biosensors or bioreactors. Both
 CC are useful in tissue typing. The present sequence represents a PRO
 CC protein of the invention

XX Sequence 182 AA;

Query Match

Best Local Similarity 100.0%; Score 444; DB 6; Length 182;

Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVETSYNFGRTFLGDKCNACIGTSCKKPKKEIRSDNWLASHGLPP 60
 Db 32 LPASSLSLVPQVETSYNFGRTFLGDKCNACIGTSCKKPKKEIRSDNWLASHGLPP 91

QY 61 DLSLSPANYSDSKIRPVEIF 83
 Db 92 DLSLSPANYSDSKIRPVEIF 114

RESULT 13

ADA45691
 IE ADA45691 standard; protein; 182 AA.

XX ADA45691;

XX DT 20-NOV-2003 (first entry)

DE Novel human secreted and transmembrane protein PRO3743.

XX Human; secreted and transmembrane protein; PRO;
 KW Tumour necrosis factor alpha release; TNF-alpha release;
 KW glucose uptake modulator; FFA uptake modulator;
 KW cell proliferation stimulator; cell differentiation stimulator;
 KW cell differentiation inhibitor; cytokine release stimulator; tumour;
 KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
 KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
 KW gene therapy; chromosome identification; chromosome marker.

OS Homo sapiens.

XX US2003022328-A1.

XX 30-JAN-2003.

XX 16-APR-2002; 2002US-00123904.

XX 31-MAR-1997; 97WC-US005230.
 PR 12-JUN-1998; 98WC-US012456.
 PR 14-JUL-1998; 98WC-US014552.
 PR 28-AUG-1998; 98WC-US017888.
 PR 10-SEP-1998; 98WC-US018824.
 PR 14-SEP-1998; 98WC-US019094.
 PR 14-SEP-1998; 98WC-US019177.
 PR 16-SEP-1998; 98WC-US019330.
 PR 17-SEP-1998; 98WC-US019437.
 PR 07-OCT-1998; 98WC-US021141.
 PR 29-OCT-1998; 98WC-US022991.
 PR 29-OCT-1998; 98WC-US022992.
 PR 20-NOV-1998; 98WC-US024855.
 PR 01-DEC-1998; 98WC-US025108.
 PR 05-JAN-1999; 99WC-US000106.
 PR 08-MAR-1999; 99WC-US005028.
 PR 10-MAR-1999; 99WC-US005190.
 PR 20-APR-1999; 99WC-US008615.
 PR 14-MAY-1999; 99WC-US010733.
 PR 02-JUN-1999; 99WC-US012252.
 PR 01-SEP-1999; 99WC-US020111.
 PR 08-SEP-1999; 99WC-US020394.
 PR 13-SEP-1999; 99WC-US020394.
 PR 15-SEP-1999; 99WC-US021547.
 PR 15-SEP-1999; 99WC-US023089.
 PR 29-NOV-1999; 99WC-US028214.
 PR 30-NOV-1999; 99WC-US028313.
 PR 30-NOV-1999; 99WC-US028409.
 PR 01-DEC-1999; 99WC-US028301.
 PR 01-DEC-1999; 99WC-US028634.
 PR 02-DEC-1999; 99WC-US028551.
 PR 02-DEC-1999; 99WC-US028564.
 PR 02-DEC-1999; 99WC-US028565.
 PR 16-DEC-1999; 99WC-US030095.
 PR 20-DEC-1999; 99WC-US030911.

PR 20-DEC-1999; 99WC-US030999.
 PR 22-DEC-1999; 99WC-US030720.
 PR 30-DEC-1999; 99WC-US031243.
 PR 30-DEC-1999; 99WC-US031274.
 PR 05-JAN-2000; 2000WC-US000219.
 PR 06-JAN-2000; 2000WC-US000277.
 PR 06-JAN-2000; 2000WC-US000376.
 PR 11-FEB-2000; 2000WC-US003565.
 PR 18-FEB-2000; 2000WC-US004341.
 PR 18-FEB-2000; 2000WC-US004342.
 PR 22-FEB-2000; 2000WC-US004414.
 PR 24-FEB-2000; 2000WC-US004914.
 PR 24-FEB-2000; 2000WC-US005004.
 PR 01-MAR-2000; 2000WC-US005601.
 PR 02-MAR-2000; 2000WC-US005746.
 PR 02-MAR-2000; 2000WC-US005841.
 PR 10-MAR-2000; 2000WC-US006319.
 PR 15-MAR-2000; 2000WC-US006884.
 PR 20-MAR-2000; 2000WC-US007377.
 PR 21-MAR-2000; 2000WC-US007532.
 PR 30-MAR-2000; 2000WC-US008439.
 PR 17-MAY-2000; 2000WC-US011705.
 PR 22-MAY-2000; 2000WC-US014042.
 PR 30-MAY-2000; 2000WC-US014941.
 PR 02-JUN-2000; 2000WC-US015264.
 PR 28-JUL-2000; 2000WC-US020710.
 PR 11-AUG-2000; 2000WC-US022031.
 PR 23-AUG-2000; 2000WC-US023522.
 PR 24-AUG-2000; 2000WC-US023328.
 PR 08-NOV-2000; 2000WC-US030952.
 PR 10-NOV-2000; 2000WC-US030873.
 PR 01-DEC-2000; 2000WC-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WC-US034956.
 PR 28-FEB-2001; 2000US-00736498.
 PR 28-FEB-2001; 2001WC-US006520.
 PR 01-MAR-2001; 2001WC-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WC-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WC-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WC-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WC-US020116.
 PR 29-JUN-2001; 2001WC-US021066.
 PR 09-JUL-2001; 2001WC-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 Smith V, Stewart TA, Tumas D, Watanabe CK, Wood W, Zhang Z;
 WPI; 2003-584997/55.
 N-PSDB; ADA45690.

Novel secreted and transmembrane polypeptide for modulating biological

activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.

Claim 12; Fig 172; 659pp; English.

The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the release of proteoglycans from cartilage cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the release of a cytokine from PWC cells, for inhibiting the binding of A-peptide to factor VIIa, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide.

Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVQVRTSYNFGRTEFLGDKNCACIGTSICKFFKEIRSDNWLASHGLPP 60
DB 32 LPASSLSLVQVRTSYNFGRTEFLGDKNCACIGTSICKFFKEIRSDNWLASHGLPP 91
QY 61 DSLLSYPNYSDSKWIRPVEIF 83
DB 92 DSLLSYPNYSDSKWIRPVEIF 114

RESULT 14

ADA76122
ID ADA76122 standard; protein; 182 AA.

AC ADA76122;

ET 20-NOV-2003 (first entry)

DE Human PRO polypeptide #86.

KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

OS Homo sapiens.

XX

PN US2003073212-A1.
XX PD 17-APR-2003.
XX PF 16-APR-2002; 2002US-00123903.
XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 01-DEC-1998; 98WO-US024855.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 02-JUN-1999; 99WO-US010733.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.

10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-US0747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-US0796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-US0802706.
 PR 14-MAR-2001; 2001US-US0808689.
 PR 22-MAR-2001; 2001US-US0816744.
 PR 05-APR-2001; 2001US-US0828366.
 PR 10-MAY-2001; 2001US-US0854208.
 PR 10-MAY-2001; 2001US-US0854280.
 PR 18-MAY-2001; 2001US-US0860216.
 PR 25-MAY-2001; 2001US-US0866028.
 PR 25-MAY-2001; 2001US-US0866334.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-US0872035.
 PR 01-JUN-2001; 2001US-US017800.
 PR 05-JUN-2001; 2001US-US0874503.
 PR 14-JUN-2001; 2001US-US0882636.
 PR 19-JUN-2001; 2001US-US0886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-US0887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-US0908927.
 PR 06-AUG-2001; 2001US-US0924419.
 PR 09-AUG-2001; 2001US-US0927796.
 PR 16-AUG-2001; 2001US-US0931836.
 PR 19-DEC-2001; 2001US-US0028072.
 XX XX
 (GETH) GENENTECH INC.
 Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tamas D, Watanabe CK, Wood WL, Zhang Z;
 DR WPI: 2003-687639/65.
 DR N-PSDB; ADA76121.
 XX
 New isolated nucleic acid encoding a secreted and transmembrane
 PT polypeptide, designated e.g. PRO1114 or PRO4978, useful in chromosome and
 PT gene mapping, in generating antisense RNA and DNA, and in gene therapy.
 XX
 Claim 12; Fig 172; 659pp; English.
 XX
 The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a
 CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 CC of human microvascular endothelial cells, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC the proliferation of or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans

CC from cartilage are useful for treating sports-related joint problems,
 CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The
 CC sequence data for this patent is also available in electronic format from
 CC USPTO at seqdata.uspto.gov/sequence.html.
 XX
 SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 1.6e-46;
 Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVLPQVTSYNEGRFLGLDKCNACIGTSICKKFKKEIRSDNWLAHLGLPP 60
 DB ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 QY 32 LPASSLSLVLPQVTSYNEGRFLGLDKCNACIGTSICKKFKKEIRSDNWLAHLGLPP 91
 DB ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 QY 61 DSSLSPANYSDSKIWPEVIF 83
 DB ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 QY 92 DSSLSPANYSDSKIWPEVIF 114
 DB ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

RESULT 15
 ADA18772
 ID ADA18772 standard; protein; 182 AA.
 XX
 AC ADA18772;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human PRO polypeptide #86.
 XX

KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
 KW tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; lung;
 KW colon; breast; prostate; rectum; cervix; liver; tumour; cancer;
 KW glucose uptake; FFA; adipocyte cell; pericyte cell; proteoglycan;
 KW cartilage; inner ear utricular supporting cell; cytokine; A-peptide;
 KW factor VIIA; endothelial cell.
 OS Homo sapiens.
 XX
 XX US2003054517-A1.
 XX
 XX 20-MAR-2003.
 XX
 XX 08-MAY-2002; 2002US-00141755.
 XX
 XX 31-MAR-1997; 97WO-US005230.
 XX 12-JUN-1998; 98WO-US012456.
 XX 14-JUL-1998; 98WO-US014552.
 XX 28-AUG-1998; 98WO-US017888.
 XX 10-SEP-1998; 98WO-US018824.
 XX 14-SEP-1998; 98WO-US019093.
 XX 14-SEP-1998; 98WO-US019094.
 XX 14-SEP-1998; 98WO-US019177.
 XX 17-SEP-1998; 98WO-US019330.
 XX 17-SEP-1998; 98WO-US019437.
 XX 29-OCT-1998; 98WO-US021141.
 XX 29-OCT-1998; 98WO-US022991.
 XX 29-OCT-1998; 98WO-US022992.
 XX 20-NOV-1998; 98WO-US024855.
 XX 01-DEC-1998; 98WO-US025108.
 XX 05-JAN-1999; 99WO-US000106.
 XX 08-MAR-1999; 99WO-US005028.
 XX 10-MAR-1999; 99WO-US005190.
 XX 20-APR-1999; 99WO-US008615.
 XX 14-MAY-1999; 99WO-US010733.
 XX 02-JUN-1999; 99WO-US012252.
 XX 01-SEP-1999; 99WO-US020111.
 XX 08-SEP-1999; 99WO-US020594.
 XX 13-SEP-1999; 99WO-US020944.

PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US000365.
 PR 18-FEB-2000; 2000WO-US000431.
 PR 18-FEB-2000; 2000WO-US000432.
 PR 22-FEB-2000; 2000WO-US000441.
 PR 24-FEB-2000; 2000WO-US0004914.
 PR 01-MAR-2000; 2000WO-US0005004.
 PR 02-MAR-2000; 2000WO-US0005601.
 PR 02-MAR-2000; 2000WO-US0005746.
 PR 02-MAR-2000; 2000WO-US0005841.
 PR 10-MAR-2000; 2000WO-US0006319.
 PR 15-MAR-2000; 2000WO-US0006884.
 PR 20-MAR-2000; 2000WO-US0007377.
 PR 21-MAR-2000; 2000WO-US0007532.
 PR 30-MAR-2000; 2000WO-US0008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US020331.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.

PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX (GETH) GENENTECH INC.
 XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-521854/49.
 DR N-PSDB; ADA18771.
 XX New PRO nucleic acid, useful for preparing a composition for treating
 PT e.g., tumors.
 XX Claim 12; Fig 172; 660pp; English.
 XX The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. lung, colon, breast,
 CC prostate, rectal, cervical and liver tumours). The polynucleotides are
 CC useful in molecular biology, including uses as hybridisation probes, in
 CC chromosome and gene mapping, in generating antisense RNA and DNA and in
 CC gene therapy. The polynucleotides may also be used in preparing PRO
 CC polypeptides by recombinant techniques and in generating either
 CC transgenic animals or knock-out animals which are useful in the
 CC development and screening of therapeutically useful reagents. The PRO
 CC polypeptides or antibodies are used in preparing a medicament for
 CC treating a condition responsive to the polypeptides or antibodies, such
 CC as tumours, for modulating the uptake of glucose or FFA by adipocyte
 CC cells, for stimulating the proliferation of or gene expression in
 CC pericyte cells, for stimulating the release of proteoglycans from
 CC cartilage, for stimulating the proliferation of inner ear utricular
 CC supporting cells, for stimulating the release of cytokines from BMC
 CC cells, for inhibiting the binding of A-peptide to factor VIIA, for
 CC inhibiting the differentiation of adipocyte cells and for stimulating the
 CC proliferation of endothelial cells. This sequence represents a human PRO
 CC polypeptide of the invention. Note: The sequence data for this patent is
 CC also available in electronic format from USPTO at
 CC seqdata.uspto.gov/sequence.html.
 XX
 XX Sequence 182 AA;
 Query Match 100.0%; Score 444; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 1.6e-46;
 Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LPASSLSLVPQVRYSYNGRTPLGLDKCNACIGTSICKKFKKEIRSDNWLASHGLPP 60
 Db |||||
 32 LPASSLSLVPQVRYSYNGRTPLGLDKCNACIGTSICKKFKKEIRSDNWLASHGLPP 91
 QY 61 DLSLSYPANYSDDSKIMRPVEIF 83
 Db |||||
 92 DLSLSYPANYSDDSKIMRPVEIF 114
 RESULT 16
 ADA61395
 ID ADA61395 standard; protein; 182 AA.
 XX
 AC ADA61395;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Homo sapiens.
 XX
 KW Human; secreted and transmembrane protein; PRO;
 KW Tumour necrosis factor alpha release; TNF-alpha release;
 KW glucose uptake modulator; FFA uptake modulator;

cell proliferation stimulator; cell differentiation stimulator;
 cell differentiation inhibitor; cytokine release stimulator; tumour;
 lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
 cervical tumour; liver tumour; chromosome mapping; gene mapping;
 gene therapy; chromosome identification; chromosome marker.

XX OS Novel.
 OS human.
 OS secreted.
 OS and.
 OS transmembrane.
 OS protein.
 OS PRO3743.
 XX OS
 PN US2003049816-A1.
 XX PD
 XX 13-MAR-2003.
 XX PF
 PF 15-APR-2002; 2002US-00123262.
 XX PR
 PR 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US0012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US013733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.
 PR 03-OCT-1999; 99WO-US023089.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028501.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028651.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.

PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 28-FEB-2001; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI: 2003-695892/66.

N-PSDB; ADA61394.

New PRO nucleic acid and encode polypeptides, are useful for
 manufacturing a medicament for diagnosing or treating cancer.

Claim 12; Fig 172; 660pp; English.

The invention describes 305 nucleic acids encoding PRO (secreted and
 transmembrane) polypeptides (I). (I) is useful for stimulating the
 release of TNF-alpha from human blood, for modulating the uptake of
 glucose or FFA by skeletal muscle cells or adipocyte cells, for
 stimulating the proliferation or differentiation of chondrocyte cells,
 for stimulating the proliferation of or gene expression in pericyte
 cells, for stimulating the release of proteoglycans from cartilage, for
 stimulating the proliferation of inner ear utricular supporting cells,
 for stimulating the proliferation of T-lymphocyte cells, for stimulating
 the release of a cytokine from PBMC cells, for inhibiting the binding of
 A-peptide to factor VIIA, for inhibiting the proliferation of adipocyte
 cells, for stimulating proliferation of endothelial cells, for detecting

CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, recta, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
XX polypeptide.

SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQVRTSYNFGRTFLGLKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVQVRTSYNFGRTFLGLKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 51
QY 61 DSLLSPANYSDSKWRPVEIF 83
Db 92 DSLLSPANYSDSKWRPVEIF 114

RESULT 17
ADBI9180
ID ADBI9180 standard; protein; 182 AA.
AC ADBI9180;
XX
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO3743.
XX
KW Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release.
XX
OS Homo sapiens.
XX
XX US2003068796-A1.
PN
XX
PD 10-APR-2003.
XX
XX
PF 15-APR-2002; 2002US-00123261.
XX
XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 05-OCT-1999; 99WO-US021547.
PR 29-NOV-1999; 99WO-US023089.
PR 30-NOV-1999; 99WO-US023313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US0003565.
PR 18-FEB-2000; 2000WO-US0004341.
PR 18-FEB-2000; 2000WO-US0004342.
PR 22-FEB-2000; 2000WO-US0004414.
PR 24-FEB-2000; 2000WO-US0004914.
PR 01-MAR-2000; 2000WO-US0005004.
PR 02-MAR-2000; 2000WO-US0005601.
PR 02-MAR-2000; 2000WO-US0005746.
PR 10-MAR-2000; 2000WO-US0005841.
PR 15-MAR-2000; 2000WO-US0006884.
PR 20-MAR-2000; 2000WO-US0007377.
PR 21-MAR-2000; 2000WO-US0007532.
PR 30-MAR-2000; 2000WO-US0008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00736498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006566.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 18-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00865028.
PR 25-MAY-2001; 2001US-00866034.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.

24-APR-2002; 2002US-00131819.
09-DEC-1999; 99US-0170262P.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
(GETH) GENENTECH INC.
Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
WPI; 2003-765415/72.
N-PSDB; ADB27720.
New PRO nucleic acid, useful for preparing a composition for treating
e.g., tumor or for tissue typing.
Claim 12; Fig 172; 637pp; English.
The invention relates to isolated human PRO polypeptides (secreted and
transmembrane polypeptides) and the polynucleotides encoding them. The
invention also relates to an antibody which specifically binds to a PRO
polypeptide, a method for stimulating the release of tumor necrosis
factor-alpha (TNF-alpha) from human blood, a method for stimulating the
proliferation or differentiation of chondrocyte cells and a method for
detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
polynucleotides are useful in molecular biology, including uses as
hybridisation probes, in chromosome and gene mapping, in generating
antisense RNA and DNA and in gene therapy. The polynucleotides may also
be used in preparing PRO polypeptides by recombinant techniques and in
generating either transgenic animals or knock-out animals which are
useful in the development and screening of therapeutically useful
reagents. The PRO polypeptides or antibodies are used in preparing a
medicament for treating a condition responsive to the polypeptides or
antibodies, such as tumours, for stimulating and inhibiting proliferation
of human microvascular endothelial cells, for modulating the uptake of
glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating
differentiation of adipocyte cells, for stimulating
proliferation of or gene expression in pericyte cells or T-lymphocyte
cells, for inducing endothelial cell tube formation and for treating
various bone and/or cartilage disorders such as sports injuries and
arthritis. PRO polypeptides which stimulate the release of proteoglycans
from cartilage are useful for treating sports-related joint problems. PRO
polypeptides are also useful for treating various mammalian haemoglobin-
associated disorders such as various thalassaemias and conditions which
may benefit from enhanced local immune system cell infiltration. This
sequence represents a human PRO polypeptide of the invention. Note: The
sequence data for this patent is also available in electronic format from
the USPTO website at seqdata.uspto.gov.
Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHGLPP 60
DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHGLPP 91
QY 61 DLSLLSYPNYSDSKIWPRVEIF 83
DB 92 DLSLLSYPNYSDSKIWPRVEIF 114
RESULT 19
ADA86200
ID ADA86200 standard; protein; 182 AA.
XX

20-JUN-2001; 2001WO-US019692.
21-JUN-2001; 2001US-0087879.
22-JUN-2001; 2001WO-US020116.
29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
18-JUL-2001; 2001US-00908827.
06-AUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00927796.
18-AUG-2001; 2001US-00931836.
19-DEC-2001; 2001US-00028072.
(GETH) GENENTECH INC.
Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
WPI; 2003-695927/66.
N-PSDB; ADB19179.
Novel secreted and transmembrane PRO polypeptides useful for stimulating
the release of tumor necrosis factor alpha and detecting the presence of
a tumor in a mammal.
Claim 12; Fig 172; 660pp; English.
The invention describes 305 nucleic acids encoding PRO (secreted and
transmembrane) polypeptides (I). (I) is useful for stimulating the
release of TNF-alpha from human blood, for modulating the uptake of
glucose or FFA by skeletal muscle cells or adipocyte
Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHGLPP 60
DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHGLPP 91
QY 61 DLSLLSYPNYSDSKIWPRVEIF 83
DB 92 DLSLLSYPNYSDSKIWPRVEIF 114
RESULT 18
ADB27721
ID ADB27721 standard; protein; 182 AA.
AC ADB27721;
XX ADB27721;
DT 20-NOV-2003 (first entry)
DE Human PRO polypeptide #86.
XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX Homo sapiens.
XX US2003082704-A1.
XX 01-MAY-2003.
XX

AC ADAB6200;
 XX 20-NOV-2003 (first entry)
 XX
 DE Novel human secreted and transmembrane protein PRO3743.
 XX
 XX Human; secreted and transmembrane protein; PRO;
 KW Tumour necrosis factor alpha release; TNF-alpha release;
 KW Glucose uptake modulator; FFA uptake modulator;
 KW cell proliferation stimulator; cell differentiation stimulator;
 KW cell differentiation inhibitor; cytokine release stimulator;
 KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
 KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
 KW gene therapy; chromosome identification; chromosome marker.
 XX
 OS Homo sapiens.
 XX
 XX US2003082711-A1.
 PN
 XX 01-MAY-2003.
 XX
 XX 16-MAY-2002; 2002US-00147508.
 XX
 XX 02-JUL-1998; 98US-0091519P.
 PR 02-JUN-1999; 99WO-US012252.
 PR 07-JUL-1999; 99US-0143348P.
 PR 25-AUG-1999; 99US-00380137.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 19-DEC-2001; 2001US-00028072.
 XX
 XX (GETH) GENENTECH INC.
 PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-786914/74.
 DR N-PSDB; ADA86199.
 XX
 XX New PRO nucleic acid, useful for preparing a composition for treating
 PT e.g., tumor or for tissue typing.
 XX
 XX Claim 12; Fig 172; 637pp; English.
 PS
 CC The invention describes 305 nucleic acids encoding PRO (secreted and
 CC transmembrane) polypeptides (I). (I) is useful for stimulating the
 CC release of TNF-alpha from human blood, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating the proliferation or differentiation of chondrocyte cells,
 CC for stimulating the proliferation of or gene expression in pericyte
 CC cells, for stimulating the release of proteoglycans from cartilage, for
 CC stimulating the proliferation of inner ear utricular supporting cells,
 CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
 CC the release of a cytokine from PBMC cells, for inhibiting the binding of
 CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
 CC cells, for stimulating proliferation of endothelial cells, for detecting
 CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
 CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
 CC are useful for isolating genomic and cDNA nucleotide sequences or
 CC antisense probes. (I) is also useful as a therapeutic agent. PRO is useful
 CC in assays to identify other proteins or molecules involved in binding
 CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
 CC and gene mapping, in generation of antisense RNA and DNA, in the
 CC preparation of PRO polypeptide, for generating transgenic animals or
 CC knockout animals which in turn are useful in the development and
 CC screening of therapeutically useful reagents, in gene therapy, for
 CC chromosome identification, as chromosome marker, and for generating
 CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
 CC detecting its expression in specific cells, tissues or serum, and for
 CC affinity purification of PRO from recombinant cell culture or natural
 CC sources. (I) and (II) are useful for tissue typing. This is the amino
 CC acid sequence of a novel human secreted and transmembrane PRO

CC polypeptide.
 XX
 SQ Sequence 182 AA;
 Query Match 100.0%; Score 444; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 1.6e-46; Indels 0; Gaps 0;
 Matches 83; Conservative 0; Mismatches 0;
 QY 1 LPASSLSLLVPOVRTSYNFGRTFLGLDKNACIGTSTICKKFFKEEIRSDNWLASHLGLPP 60
 Db 32 LPASSLSLLVPOVRTSYNFGRTFLGLDKNACIGTSTICKKFFKEEIRSDNWLASHLGLPP 91
 QY 61 DSLSSYPANYSDDSKLWRPVEIF 83
 Db 92 DSLSSYPANYSDDSKLWRPVEIF 114
 RESULT 20
 ADB15764
 ID ADB15764 standard; protein; 182 AA.
 XX
 AC ADB15764;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human PRO polypeptide #86.
 XX
 XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
 KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
 KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
 KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
 KW immune system cell infiltration.
 XX
 OS Homo sapiens.
 XX
 XX US2003087350-A1.
 XX
 XX 08-MAY-2003.
 XX
 XX 22-APR-2002; 2002US-00127821.
 XX
 XX 04-AUG-1998; 98US-0095301P.
 PR 02-JUN-1999; 99WO-US012252.
 PR 25-AUG-1999; 99US-00380137.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 19-DEC-2001; 2001US-00028072.
 XX
 XX (GETH) GENENTECH INC.
 XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-786914/74.
 DR N-PSDB; ADB15763.
 XX
 XX New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
 PT and for manufacturing a medicament for diagnosing or treating tumor.
 XX
 XX Claim 12; Fig 172; 637pp; English.
 XX
 CC The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for

CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalasaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLPQVTSNFGRTFLGDKNCACIGTSCKKFKKEIRSDNWLASHGLGPP 60
Db 32 LPASSLSLPQVTSNFGRTFLGDKNCACIGTSCKKFKKEIRSDNWLASHGLGPP 91

QY 61 DLSLSYPANYSDDSKIRPVEIF 83
Db 92 DLSLSYPANYSDDSKIRPVEIF 114

RESULT 21

ADA47550

ID ADA47550 standard; protein; 182 AA.

XX

AC ADA47550;

XX

XX 20-NOV-2003 (first entry)

DE

XX Human PRO polypeptide #86.

XX

KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

OS Homo sapiens.

XX

XX US2003073215-A1.

PN

XX 17-APR-2003.

PD

XX 07-MAY-2002; 2002US-00140925.

PF

XX 31-MAR-1997; 97WO-US005230.

XX

PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 98WO-US000106.
PR 08-MAR-1999; 98WO-US005028.
PR 10-MAR-1999; 98WO-US005190.
PR 20-APR-1999; 98WO-US008615.
PR 14-MAY-1999; 98WO-US010733.
PR 02-JUN-1999; 98WO-US012252.
PR 01-SEP-1999; 98WO-US020111.
PR 08-SEP-1999; 98WO-US020594.
PR 13-SEP-1999; 98WO-US020944.
PR 15-SEP-1999; 98WO-US021090.
PR 15-SEP-1999; 98WO-US021547.
PR 05-OCT-1999; 98WO-US023089.
PR 29-NOV-1999; 98WO-US028214.
PR 30-NOV-1999; 98WO-US028313.
PR 30-NOV-1999; 98WO-US028409.
PR 01-DEC-1999; 98WO-US028301.
PR 01-DEC-1999; 98WO-US028634.
PR 02-DEC-1999; 98WO-US028551.
PR 02-DEC-1999; 98WO-US028564.
PR 16-DEC-1999; 98WO-US028565.
PR 20-DEC-1999; 98WO-US030095.
PR 20-DEC-1999; 98WO-US030911.
PR 22-DEC-1999; 98WO-US030999.
PR 30-DEC-1999; 98WO-US031243.
PR 30-DEC-1999; 98WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.

PR 09-MAR-2001; 2001US-00822706.
 PR 14-MAR-2001; 2001US-00823689.
 PR 22-MAR-2001; 2001US-00815744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00860208.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001US-00866034.
 PR 01-JUN-2001; 2001US-00871092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001US-00871800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001US-00891962.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001US-008920116.
 PR 29-JUN-2001; 2001US-008921066.
 PR 09-JUL-2001; 2001US-008921735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 PR XX (GETH) GENENTECH INC.
 PR XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PR FI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PR PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 PR DR WPI: 2003-644801/61.
 PR DR N-PSDB; ADA47549.
 PR XX
 PR PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
 PR PT in gene therapy, detecting the presence of tumor in a mammal, or
 PR PT modulating the uptake of glucose or free fatty acid by skeletal muscle
 PR PT cells or adipocyte cells.
 PR XX
 PR PS Claim 12; Fig 172: 659pp; English.
 PR XX
 CC The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a
 CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 CC of human macrovascular endothelial cells, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC proliferation or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 CC from cartilage are useful for treating sports-related joint problems,
 CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The

CC sequence data for this patent is also available in electronic format from
 CC USPTO at seqdata.uspto.gov/sequence.html.
 XX
 SQ Sequence 182 AA;
 CC Query Match 100.0%; Score 444; DB 6; Length 182;
 CC Best Local Similarity 100.0%; Pred. No. 1.6e-46;
 CC Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 LPASSLSLVPQVTSYNGRTFLGLDKCNACIGTSTICKKFFKEEIRSDNKLASHLGLPP 60
 DB 32 LPASSLSLVPQVTSYNGRTFLGLDKCNACIGTSTICKKFFKEEIRSDNKLASHLGLPP 91
 QY 61 DLSLLSPANYSDSKLWRPVEIF 83
 DB 92 DLSLLSPANYSDSKLWRPVEIF 114
 RESULT 22
 ADA67345
 ID ADA67345 standard; protein; 182 AA.
 XX
 AC ADA67345;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human PRO polypeptide #86.
 XX
 KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
 KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
 KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
 KW liver; microvascular endothelial cell; glucose; FFA;
 KW skeletal muscle cell; adipocyte cell; pericyte cell;
 KW inner ear utricular supporting cell; T-lymphocyte cell;
 KW endothelial cell tube formation; bone disorder; cartilage disorder;
 KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
 KW rheumatoid arthritis; haemoglobin-associated disorder; thalassemia;
 KW immune system cell infiltration.
 XX
 OS Homo sapiens.
 PN
 PN US2003068795-A1.
 XX
 PD 10-APR-2003.
 XX
 PF 15-APR-2002; 2002US-00123236.
 XX
 PR 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 98WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.

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PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023322.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006566.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
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PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 08-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

XX PA (GETH ) GENENTECH INC.
XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
XX Gerritsen ME, Goddard A, Godowski P, Gurney AL, Sherwood S;
XX Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-695926/66.
XX N-PSDB; ADA67344.
XX Novel isolated PRO secreted and transmembrane polypeptides useful for
XX stimulating the release of tumor necrosis factor-alpha from human blood
XX and detecting the presence of a tumor in a mammal.
XX Claim 12; Fig 172; 660pp; English.
XX The invention relates to isolated human PRO polypeptides (secreted and
XX transmembrane polypeptides) and the polynucleotides encoding them. The
XX invention also relates to an antibody which specifically binds to a PRO
XX polypeptide, a method for stimulating the release of tumor necrosis
XX factor-alpha (TNF-alpha) from human blood, a method for stimulating the
XX proliferation or differentiation of chondrocyte cells and a method for
XX detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
XX colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
XX polynucleotides are useful in molecular biology, including uses as
XX hybridisation probes, in chromosome and gene mapping, in generating
XX antisense RNA and DNA and in gene therapy. The polynucleotides may also
XX be used in preparing PRO polypeptides by recombinant techniques and in
XX generating either transgenic animals or knock-out animals which are
XX useful in the development and screening of therapeutically useful
XX reagents. The PRO polypeptides or antibodies are used in preparing a
XX medicament for treating a condition responsive to the polypeptides or
XX antibodies, such as tumours, for stimulating and inhibiting proliferation
XX of human microvascular endothelial cells, for modulating the uptake of
XX glucose or FFA by skeletal muscle cells or adipocyte cells, for
XX stimulating differentiation of adipocyte cells, for stimulating
XX proliferation of or gene expression in pericyte cells, for stimulating
XX the proliferation of inner ear utricular supporting cells or T-lymphocyte
XX cells, for inducing endothelial cell tube formation and for treating
XX various bone and/or cartilage disorders such as sports injuries and
XX arthritis. PRO polypeptides which stimulate the release of proteoglycans
XX from cartilage are useful for treating sports-related joint problems, PRO
XX articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
XX polypeptides are also useful for treating various mammalian haemoglobin-
XX associated disorders such as various thalassaemias and conditions which
XX may benefit from enhanced local immune system cell infiltration. This
XX sequence represents a human PRO polypeptide of the invention. Note: The
XX sequence data for this patent is also available in electronic format from
XX USPTO at seqdata.uspto.gov/sequence.html.
XX SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 LPASSLSLVQVQRTSYNFGRTFLGLDKNCACIGTSICKFFKFEIRSDNWLASHGLGPP 60
Db 32 LPASSLSLVQVQRTSYNFGRTFLGLDKNCACIGTSICKFFKFEIRSDNWLASHGLGPP 91
Qy 61 DSLLSYPANYSDDSKIWRPVEIF 83
Db 92 DSLLSYPANYSDDSKIWRPVEIF 114
RESULT 23
ADB30352
ID ADB30352 standard; protein; 182 AA.
XX ADB30352;
XX 20-NOV-2003 (first entry)
XX
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DE Human PRO polypeptide #86.
XX Human, PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; PFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
ZN US2003068794-A1.
XX
PD 10-APR-2003.
XX
PF 15-APR-2002; 2002US-00123155.
XX
PR 31-MAR-1997; 99WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 29-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030993.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.

PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US011705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001US-00891962.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PU, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX

DR WPI; 2003-708391/67.
DR N-PSDB; ADB30351.

XX
PT New isolated PRO polypeptides e.g. PRO1801 and PRO1114, useful in the
PT preparation of a medicament for treating a condition responsive to PRO
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX

XX Claim 12; Fig 172; 660pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating

antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from the USPTO website at seqdata.uspto.gov.

XX SQ Sequence 182 AA;
Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKPFKEIRSDNWLASHGLGPP 60
DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKPFKEIRSDNWLASHGLGPP 91
QY 61 DSLLSYPANYSDSKWRPVEIF 83
DB 92 DSLLSYPANYSDSKWRPVEIF 114

RESULT 24

ADA85648
ID ADA85648 standard; protein; 182 AA.

AC ADA85648;

XX 20-NOV-2003 (first entry)

DT Novel human secreted and transmembrane protein PRO3743.

DE Human; secreted and transmembrane protein; PRO;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.

XX Homo sapiens.

XX US2003082693-A1.

XX 01-MAY-2003.

XX 22-APR-2002; 2002US-00127843.

XX 05-JUN-2000; 2000US-0209832P.

PR 01-DEC-2000; 2000WQ-US032678.

PR 19-DEC-2001; 2001US-00028072.

PA (GETH) GENENTECH INC.

XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI: 2003-786907/74.
DR N-PSDB; ADA85647.
XX New PRO nucleic acid, useful for preparing a composition for treating e.g., tumor or for tissue typing.
PT Claim 12; Fig 172; 637pp; English.

XX The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the release of a cytokine from PBM cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide.

XX SQ Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;

Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKPFKEIRSDNWLASHGLGPP 60

DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKPFKEIRSDNWLASHGLGPP 91

QY 61 DSLLSYPANYSDSKWRPVEIF 83

DB 92 DSLLSYPANYSDSKWRPVEIF 114

RESULT 25

ADA96860

ID ADA96860 standard; protein; 182 AA.

AC ADA96860;

XX 20-NOV-2003 (first entry)

XX Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;

XX tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;

XX cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;

XX liver; microvascular endothelial cell; glucose; PFA;

XX skeletal muscle cell; adipocyte cell; pericyte cell;

XX inner ear utricular supporting cell; T-lymphocyte cell;

XX endothelial cell tube formation; bone disorder; cartilage disorder;

KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
XX immune system cell infiltration.
OS Homo sapiens.

PN US2003082705-A1.

PD 01-MAY-2003.

XX 24-APR-2002; 2002US-00131829.

XX 09-DEC-1999; 99US-0170262P.

PR 01-DEC-2000; 2000WO-US032678.

PR 19-DEC-2001; 2001US-00028072.

XX (GETH) GENENTECH INC.

PA Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Garritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

XX WPI; 2003-755112/71.

DR N-PSDB; ADA96859.

XX New PRO nucleic acid, useful for preparing a composition for treating

PT e.g., tumor or for tissue typing.

XX Claim 12; Fig 172; 637pp; English.

XX The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung, the
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC the proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1-6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVTRSYNFGRTPLGLDKCNACIGTICKKFKFKFKIRSDNWLASHGLPP 60
DB 32 LPASSLSLVPQVTRSYNFGRTPLGLDKCNACIGTICKKFKFKFKIRSDNWLASHGLPP 91

QY 61 DLSLSYEPANYSDSKIWPRVEIF 83
DB 92 DLSLSYEPANYSDSKIWPRVEIF 114

RESULT 26

ADA79164

AD ADA79164 standard; protein; 182 AA.

XX AC ADA79164;

XX DT 20-NOV-2003 (first entry)

XX DB Human PRO polypeptide #86.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; kidney; cervix;
KW liver; macrovascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

OS Homo sapiens.

PN US2003082763-A1.

XX 01-MAY-2003.

XX 17-APR-2002; 2002US-00124818.

XX 31-MAR-1997; 97WO-US0005230.

XX 12-JUN-1998; 98WO-US012456.

XX 14-JUN-1998; 98WO-US014552.

XX 28-AUG-1998; 98WO-US017888.

XX 10-SEP-1998; 98WO-US018824.

XX 14-SEP-1998; 98WO-US019093.

XX 14-SEP-1998; 98WO-US019094.

XX 14-SEP-1998; 98WO-US019177.

XX 16-SEP-1998; 98WO-US019330.

XX 17-SEP-1998; 98WO-US019437.

XX 29-OCT-1998; 98WO-US021141.

XX 29-OCT-1998; 98WO-US022991.

XX 29-OCT-1998; 98WO-US024855.

XX 01-DEC-1998; 98WO-US025108.

XX 05-JAN-1999; 99WO-US000106.

XX 08-MAR-1999; 99WO-US0005028.

XX 10-MAR-1999; 99WO-US0005190.

XX 20-APR-1999; 99WO-US0008615.

XX 14-MAY-1999; 99WO-US010733.

XX 02-JUN-1999; 99WO-US012252.

XX 01-SEP-1999; 99WO-US020111.

XX 08-SEP-1999; 99WO-US020594.

XX 13-SEP-1999; 99WO-US020944.

XX 15-SEP-1999; 99WO-US021090.

XX 15-SEP-1999; 99WO-US021547.

XX 05-OCT-1999; 99WO-US023089.

XX 23-NOV-1999; 99WO-US028214.

XX 30-NOV-1999; 99WO-US028313.

XX 30-NOV-1999; 99WO-US028409.

XX 01-DEC-1999; 99WO-US028301.

XX 01-DEC-1999; 99WO-US028634.

XX 02-DEC-1999; 99WO-US028551.

XX 02-DEC-1999; 99WO-US028564.

XX 16-DEC-1999; 99WO-US030095.

XX 20-DEC-1999; 99WO-US030911.

XX 20-DEC-1999; 99WO-US030999.

PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 15-MAR-2000; 2000WO-US006319.
 PR 20-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 18-MAY-2001; 2001US-00863216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 01-JUN-2001; 2001US-00817092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00969827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

XX Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen XF, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-755116/71.
 DR N-PSDB; ADA79163.

XX New secreted and transmembrane PRO polypeptides and nucleic acids, useful
 PT in detection and treatment of cancer and in modulating the uptake of

PT Glucose or free fatty acid by skeletal muscle cells or adipocyte cells.
 XX Claim 12; Fig 172; 659pp; English.
 PS The invention relates to isolated human PRO polypeptides (secreted and
 XX transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a
 CC medicament for treating a condition responsive to the polypeptides or
 CC antibodies, such as tumours, for stimulating and inhibiting proliferation
 CC of human microvascular endothelial cells, for modulating the uptake of
 CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
 CC stimulating differentiation of adipocyte cells, for stimulating
 CC proliferation of or gene expression in pericyte cells, for stimulating
 CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
 CC cells, for inducing endothelial cell tube formation and for treating
 CC various bone and/or cartilage disorders such as sports injuries and
 CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
 CC from cartilage are useful for treating sports-related joint problems,
 CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 CC polypeptides are also useful for treating various mammalian haemoglobin-
 CC associated disorders such as various thalassemias and conditions which
 CC may benefit from enhanced local immune system cell infiltration. This
 CC sequence represents a human PRO polypeptide of the invention. Note: The
 CC sequence data for this patent is also available in electronic format from
 CC USPTO at seqdata.uspto.gov/sequence.html.

XX SQ Sequence 182 AA;

Query Match	100.0%;	Score 444;	DB 5;	Length 182;
Best Local Similarity	100.0%;	Pred. No. 1.6e-46;		
Matches	83;	Conservative	0;	Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKPKFKIEIRSDNWLASHLGAPP 60
 DB 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKPKFKIEIRSDNWLASHLGAPP 60
 QY 61 DSLLSYPNYSDDSKINRPVEIP 83
 DB 61 DSLLSYPNYSDDSKINRPVEIP 83
 QY 62 DSLLSYPNYSDDSKINRPVEIP 114
 DB 62 DSLLSYPNYSDDSKINRPVEIP 114

RESULT 27

ADA87303

ID ADA87303 standard; protein; 182 AA.

XX ADA87303;

DT 20-NOV-2003 (first entry)

DE Novel human secreted and transmembrane protein PRO3743.

XX Human; secreted and transmembrane protein; PRO;
 KW Tumour necrosis factor alpha release; TNF-alpha release;
 KW Glucose uptake modulator; FFA uptake modulator;
 KW cell proliferation stimulator; cell differentiation stimulator;
 KW cell differentiation inhibitor; cytokine release stimulator; tumour;
 KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
 KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
 KW gene therapy; chromosome identification; chromosome marker.
 XX Homo sapiens.

XX	US2003087345-A1.	
XX	08-MAY-2003.	
XX	16-APR-2002; 2002US-00123307.	
XX	31-MAR-1997; 97WO-US0005230.	
XX	12-JUN-1998; 98WO-US012456.	
XX	14-JUL-1998; 98WO-US014552.	
XX	28-AUG-1998; 98WO-US017888.	
XX	10-SEP-1998; 98WO-US018824.	
XX	14-SEP-1998; 98WO-US019093.	
XX	14-SEP-1998; 98WO-US019094.	
XX	14-SEP-1998; 98WO-US019177.	
XX	16-SEP-1998; 98WO-US019330.	
XX	17-SEP-1998; 98WO-US019437.	
XX	07-OCT-1998; 98WO-US021141.	
XX	29-OCT-1998; 98WO-US022891.	
XX	29-OCT-1998; 98WO-US022992.	
XX	29-OCT-1998; 98WO-US024855.	
XX	01-DEC-1998; 98WO-US024855.	
XX	05-JAN-1999; 99WO-US000106.	
XX	08-MAR-1999; 99WO-US005028.	
XX	10-MAR-1999; 99WO-US005190.	
XX	10-MAR-1999; 99WO-US006319.	
XX	20-MAR-1999; 99WO-US006319.	
XX	14-MAY-1999; 99WO-US010732.	
XX	02-JUN-1999; 99WO-US012252.	
XX	01-SEP-1999; 99WO-US020111.	
XX	08-SEP-1999; 99WO-US020594.	
XX	13-SEP-1999; 99WO-US020944.	
XX	15-SEP-1999; 99WO-US021090.	
XX	15-SEP-1999; 99WO-US021547.	
XX	05-OCT-1999; 99WO-US023089.	
XX	29-NOV-1999; 99WO-US028214.	
XX	30-NOV-1999; 99WO-US028313.	
XX	30-NOV-1999; 99WO-US028409.	
XX	01-DEC-1999; 99WO-US028301.	
XX	01-DEC-1999; 99WO-US028634.	
XX	02-DEC-1999; 99WO-US028551.	
XX	02-DEC-1999; 99WO-US028564.	
XX	02-DEC-1999; 99WO-US028565.	
XX	16-DEC-1999; 99WO-US030095.	
XX	20-DEC-1999; 99WO-US030911.	
XX	20-DEC-1999; 99WO-US030999.	
XX	22-DEC-1999; 99WO-US030720.	
XX	30-DEC-1999; 99WO-US031243.	
XX	30-DEC-1999; 99WO-US031274.	
XX	05-JAN-2000; 2000WO-US000219.	
XX	06-JAN-2000; 2000WO-US000277.	
XX	06-JAN-2000; 2000WO-US000376.	
XX	11-FEB-2000; 2000WO-US0003565.	
XX	18-FEB-2000; 2000WO-US000431.	
XX	18-FEB-2000; 2000WO-US004342.	
XX	22-FEB-2000; 2000WO-US004414.	
XX	24-FEB-2000; 2000WO-US004914.	
XX	24-FEB-2000; 2000WO-US005004.	
XX	01-MAR-2000; 2000WO-US005601.	
XX	02-MAR-2000; 2000WO-US005746.	
XX	02-MAR-2000; 2000WO-US005841.	
XX	15-MAR-2000; 2000WO-US006884.	
XX	20-MAR-2000; 2000WO-US007377.	
XX	21-MAR-2000; 2000WO-US007532.	
XX	30-MAR-2000; 2000WO-US008439.	
XX	17-MAY-2000; 2000WO-US013705.	
XX	22-MAY-2000; 2000WO-US014042.	
XX	30-MAY-2000; 2000WO-US014941.	
XX	02-JUN-2000; 2000WO-US015264.	
XX	28-JUL-2000; 2000WO-US020710.	
XX	11-AUG-2000; 2000WO-US022031.	
XX	23-AUG-2000; 2000WO-US023522.	
XX	24-AUG-2000; 2000WO-US023328.	
XX	08-NOV-2000; 2000WO-US030952.	
XX	10-NOV-2000; 2000WO-US030873.	
XX	01-DEC-2000; 2000WO-US032678.	
XX	20-DEC-2000; 2000US-00747259.	
XX	20-DEC-2000; 2000WO-US034956.	
XX	28-FEB-2001; 2001US-00796498.	
XX	28-FEB-2001; 2001WO-US006520.	
XX	01-MAR-2001; 2001WO-US006666.	
XX	09-MAR-2001; 2001US-00802706.	
XX	14-MAR-2001; 2001US-00808689.	
XX	22-MAR-2001; 2001US-00816744.	
XX	05-APR-2001; 2001US-00828366.	
XX	10-MAY-2001; 2001US-00854208.	
XX	18-MAY-2001; 2001US-00854280.	
XX	25-MAY-2001; 2001US-00860216.	
XX	25-MAY-2001; 2001US-00866034.	
XX	25-MAY-2001; 2001WO-US017092.	
XX	01-JUN-2001; 2001US-00872035.	
XX	01-JUN-2001; 2001WO-US017800.	
XX	05-JUN-2001; 2001US-00874503.	
XX	14-JUN-2001; 2001US-00882636.	
XX	19-JUN-2001; 2001US-00886342.	
XX	20-JUN-2001; 2001WO-US019692.	
XX	21-JUN-2001; 2001US-00887879.	
XX	22-JUN-2001; 2001WO-US020116.	
XX	29-JUN-2001; 2001WO-US021066.	
XX	09-JUL-2001; 2001WO-US021735.	
XX	18-JUL-2001; 2001US-00908827.	
XX	06-AUG-2001; 2001US-00924419.	
XX	09-AUG-2001; 2001US-00927796.	

affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide.

Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNMLASHGLGPP 60
DB 32 LPASSLSLVQVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNMLASHGLGPP 91
QY 61 DSSLSPYANYSDSKWIRPVEIF 83
DB 92 DSSLSPYANYSDSKWIRPVEIF 114

RESULT 28
ADBI6505
ID ADBI6505 standard; protein; 182 AA.
AC ADBI6505;
DT 20-NOV-2003 (first entry)
DE Human PRO polypeptide #86.
KW Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

OS Homo sapiens.
XX US2003087349-A1.
XX 08-MAY-2003.
XX 19-APR-2002; 2002US-00125928.
XX 19-JUN-1998; 98US-00899472.
XX 02-JUN-1999; 99WO-US012252.
XX 25-AUG-1999; 99US-00380137.
XX 02-MAR-2000; 2000WO-US005841.
XX 01-DEC-2000; 2000WO-US032678.
XX 19-DEC-2001; 2001US-00028072.
XX {GETH } GENENTECH INC.
XX Baker KE, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
XX Gerritsen WF, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
XX Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX WPI; 2003-786940/74.
XX N-PSDB; ADBI6504.
XX New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
XX and for manufacturing a medicament for diagnosing or treating tumor.
XX Claim 12; Fig 172; 637pp; English.
XX The invention relates to isolated human PRO polypeptides (secreted and
XX transmembrane polypeptides) and the polynucleotides encoding them. The
XX invention also relates to an antibody which specifically binds to a PRO

polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.

Sequence 182 AA;

Query Match 100.0%; Score 444; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.6e-46;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNMLASHGLGPP 60
DB 32 LPASSLSLVQVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNMLASHGLGPP 91
QY 61 DSSLSPYANYSDSKWIRPVEIF 83
DB 92 DSSLSPYANYSDSKWIRPVEIF 114

RESULT 29
ADA91597
ID ADA91597 standard; protein; 182 AA.
AC ADA91597;
DT 20-NOV-2003 (first entry)
DE Novel human secreted and transmembrane protein PRO3743.
KW Human; secreted and transmembrane protein; PRO;
KW tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
OS Homo sapiens.
XX US2003082694-A1.
XX 01-MAY-2003.
XX 22-APR-2002; 2002US-00127845.


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XX      Sequence 182 AA;
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    Query Match      100.0%; Score 444; DB 6; Length 182;
    Best Local Similarity 100.0%; Pred. No. 1.6e-46;
    Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 LPASSLSILVPOVRTSYNFGRTFLGLDKCNACIGTSCCKFFKEETRSNDNWLASHLGLPP 60
Db      32 LPASSLSILVPOVRTSYNFGRTFLGLDKCNACIGTSCCKFFKEETRSNDNWLASHLGLPP 91

Qy      61 DSLASYPANYSDDSKIWRPVEIP 83
Db      92 DSLASYPANYSDDSKIWRPVEIP 114
  
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Search completed: June 14, 2004, 07:55:49
 Job time : 32.9472 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 07:58:31 ; Search time 10.3358 Seconds
(without alignments)

414.572 Million cell updates/sec

Title: US-10-C54-988-114_COPY_32_114

Perfect score: 444

Sequence: 1 LPASSLSLUPQVPTSYNFG.....LSYPANYSDDSKIRPVEIF 83

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

Issued Patents AA.*

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2: /cgn2_6/ptodata/2/iaa/5B COMB.pap.*

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4: /cgn2_6/ptodata/2/iaa/6B COMB.pap.*

5: /cgn2_6/ptodata/2/iaa/PCTUS COMB.pap.*

6: /cgn2_6/ptodata/2/iaa/backfiles1.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	444	100.0	182	4	US-09-904-615-114
2	444	100.0	209	4	US-09-904-615-168
3	316	71.2	146	4	US-09-489-847-161
4	316	71.2	146	4	US-09-904-615-121
5	316	71.2	146	4	US-09-904-615-121
6	231	52.0	79	4	US-09-904-615-169
7	231	52.0	80	4	US-09-904-615-120
8	70.5	15.9	294	4	US-09-424-349A-9
9	70.5	15.9	294	4	US-09-424-349A-9
10	68	15.3	296	4	US-09-655-270A-7
11	68	15.3	296	4	US-09-651-941-7
12	68	15.3	296	4	US-09-955-597-7
13	66.5	15.0	347	4	US-09-328-352-7107
14	65.5	14.8	735	4	US-09-585-858-10
15	64.5	14.5	1529	4	US-09-134-001C-3945
16	63.5	14.3	145	4	US-09-370-838-75
17	60.5	13.6	249	4	US-09-328-352-4629
18	59.5	13.4	321	4	US-09-134-000C-4439
19	58.5	13.2	420	4	US-09-489-039A-8961
20	58	13.1	158	5	PCT-US94-01149-27
21	58	13.1	206	6	5221624-30
22	58	13.1	284	4	US-09-165-827C-14
23	58	13.1	342	4	US-09-165-827C-2
24	58	13.1	907	3	US-08-990-140-4
25	58	13.1	907	4	US-09-546-238-4
26	58	13.1	940	3	US-08-810-712-7
27	58	13.1	1028	4	US-09-543-681A-7181
28	57.5	13.0	131	0	Sequence 114, App
29	57.5	13.0	131	0	Sequence 168, App
30	57.5	13.0	131	0	Sequence 168, App
31	57.5	13.0	131	0	Sequence 121, App
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33	57.5	13.0	131	0	Sequence 167, App
34	57.5	13.0	131	0	Sequence 120, App
35	57.5	13.0	131	0	Sequence 2, Appli
36	57.5	13.0	131	0	Sequence 9, Appli
37	57.5	13.0	131	0	Sequence 7, Appli
38	57.5	13.0	131	0	Sequence 7, Appli
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97	57.5	13.0	131	0	Sequence 7, Appli
98	57.5	13.0	131	0	Sequence 7, Appli
99	57.5	13.0	131	0	Sequence 7, Appli
100	57.5	13.0	131	0	Sequence 7, Appli

Sequence 4500, Ap
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Sequence 22, Appl
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Sequence 2, Appl
Sequence 13, Appl
Sequence 6, Appl
Sequence 5, Appl
Sequence 4, Appl
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Sequence 13, Appl
Sequence 6371, Ap
Sequence 4693, Ap
Sequence 2753, Ap
Sequence 11715, A
Sequence 4, Appl
Sequence 3, Appl
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Sequence 2, Appl
Sequence 9, Appl
Sequence 4, Appl
Sequence 5, Appl
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Sequence 3480, Ap
Sequence 9, Appl
Sequence 2, Appl
Sequence 8109, Ap
Sequence 11625, A
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Sequence 2, Appl
Sequence 2, Appl
Sequence 9, Appl
Sequence 10, Appl
Sequence 3, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 4, Appl

ALIGNMENTS

RESULT 1

US-09-904-615-114
; Sequence 114, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 162
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-114

Query Match 100.0%; Score 444; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.7e-49;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 DSLLSYYPANYSDDSKIWPRVEIF 83
Db 92 DSLLSYYPANYSDDSKIWPRVEIF 114

RESULT 2

US-09-904-615-168
; Sequence 168, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-168

Query Match 100.0%; Score 444; DB 4; Length 209;
Best Local Similarity 100.0%; Pred. No. 2e-49;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 59 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 118

QY 61 DSLLSYYPANYSDDSKIWPRVEIF 83
Db 119 DSLLSYYPANYSDDSKIWPRVEIF 141

RESULT 3

US-09-489-847-161
; Sequence 161, Application US/09489847
; Patent No. 6476195
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031P1
; CURRENT APPLICATION NUMBER: US/09/489,847
; CURRENT FILING DATE: 2000-01-24
; EARLIER APPLICATION NUMBER: PCT/US99/17130
; EARLIER FILING DATE: 1999-07-29
; EARLIER APPLICATION NUMBER: 60/094,657
; EARLIER FILING DATE: 1998-07-30
; EARLIER APPLICATION NUMBER: 60/095,486
; EARLIER FILING DATE: 1998-08-05
; EARLIER APPLICATION NUMBER: 60/096,319
; EARLIER FILING DATE: 1998-08-12
; EARLIER APPLICATION NUMBER: 60/095,454
; EARLIER FILING DATE: 1998-08-06
; EARLIER APPLICATION NUMBER: 60/095,455
; EARLIER FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 161
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
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; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-489-847-161

Query Match 71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred. No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
QY 61 D-SLLSYYPANYSDDSKIWPR 79
Db 92 RFLXSYPCKLQMXKIWP 112


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; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 169
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
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; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
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; NAME/KEY: SITE
; LOCATION: (122)
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; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-904-615-169
Query Match 71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred.No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;
QY 1 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKEIRSDNWLASHLGPP 60
DB 32 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKEIRSDNWLASHLGTTAS 91
QY 61 D-SLLSYPNYSYD-DSKIWRP 79
DB 92 RPPLXSPCKLLQMIXKIWP 112
RESULT 6
US-09-904-615-167
; Sequence 167, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032PI
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 167
; LENGTH: 79
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-904-615-167
Query Match 52.0%; Score 231; DB 4; Length 79;
Best Local Similarity 100.0%; Pred.No. 2e-22;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKE 44
DB 32 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKFE 75
RESULT 7
US-09-904-615-121
; Sequence 121, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032PI
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 121
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-904-615-121
Query Match 71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred.No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;
QY 1 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKEIRSDNWLASHLGPP 60
DB 32 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKEIRSDNWLASHLGTTAS 91
QY 61 D-SLLSYPNYSYD-DSKIWRP 79
DB 92 RPPLXSPCKLLQMIXKIWP 112
RESULT 5
US-09-904-615-169
; Sequence 169, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032PI
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170

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; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 169
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-904-615-169
Query Match 71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred. No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;
QY 1 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKEIRSDNWLASHLGPP 60
DB 32 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKEIRSDNWLASHLGTTAS 91
QY 61 D-SLLSYPNYSYD-DSKIWRP 79
DB 92 RPLXSYPCKLQMIXKIWP 112
RESULT 6
US-09-904-615-167
; Sequence 167, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032PI
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 167
; LENGTH: 79
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-904-615-167
Query Match 52.0%; Score 231; DB 4; Length 79;
Best Local Similarity 100.0%; Pred. No. 2e-22;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKE 44
DB 32 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKFE 75
RESULT 7
US-09-904-615-121
; Sequence 121, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032PI
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 121
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (132)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-904-615-121
Query Match 71.2%; Score 316; DB 4; Length 146;
Best Local Similarity 80.2%; Pred. No. 4.5e-33;
Matches 65; Conservative 0; Mismatches 14; Indels 2; Gaps 2;
QY 1 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKEIRSDNWLASHLGPP 60
DB 32 LPASSLSLVPQVTSYNFGRFTFLGLDKCNACIGTSCICKKFKKEIRSDNWLASHLGTTAS 91
QY 61 D-SLLSYPNYSYD-DSKIWRP 79
DB 92 RPLXSYPCKLQMIXKIWP 112
RESULT 5
US-09-904-615-169
; Sequence 169, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: PZ032PI
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170

```

;; TITLE OF INVENTION: Human Hox C10 and Polynucleotide Encoding Same
;; NUMBER OF SEQUENCES: 14
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
;; CECCHI, STEWART & OLSTEIN
;; STREET: 6 BECKER FARM ROAD
;; CITY: ROSELAND
;; STATE: NEW JERSEY
;; COUNTRY: USA
;; ZIP: 07068

;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: 3.5 INCH DISKETTE
;; COMPUTER: IBM PS/2
;; OPERATING SYSTEM: MS-DOS
;; SOFTWARE: WORD PERFECT 5.1

;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/165.827C
;; FILING DATE: 02-Oct-1998
;; CLASSIFICATION: <Unknown>
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: <Unknown>
;; FILING DATE: <Unknown>
;; ATTORNEY/AGENT INFORMATION:
;; NAME: MULLINS, J.G.
;; REGISTRATION NUMBER: 33,073
;; REFERENCE/DOCKET NUMBER: 640100-164 (97-011)
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 201-994-1744
;; TELEFAX: 201-994-1744

;; INFORMATION FOR SEQ ID NO: 14:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 284 AMINO ACIDS
;; TYPE: AMINO ACID
;; STRANDEDNESS: <Unknown>
;; TOPOLOGY: LINEAR
;; MOLECULE TYPE: PROTEIN
;; SEQUENCE DESCRIPTION: SEQ ID NO: 14:

US-09-165-827C-14
Query Match 13.1%; Score 58; DB 4; Length 284;
Best Local Similarity 29.3%; Pred. No. 25;
Matches 24; Conservative 11; Mismatches 45; Indels 2; Gaps 2;

QY 1 LPASSLSLVPQVTSYNGRTGLGDKNACIGTSICKKFKKEIRSDNNLASHGLP 60
Db 133 LPESCLGEHVPVPSYRSPYSALDKTHCSGANDFEAPF-EQRASLNPRAHLESPO 191

QY 61 -DSLLSYPNYSDSKIRPVE 81
Db 192 LGGKVSFPETPKSDSQTPAPMK 213

RESULT 23
US-09-165-827C-2
Sequence 2, Application US/09165827C
Patent No. 6358702
GENERAL INFORMATION:
APPLICANT: Timothy Connolly and Jian Zhang
TITLE OF INVENTION: Human Hox C10 and Polynucleotide Encoding Same
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1

;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/165.827C
;; FILING DATE: 02-Oct-1998
;; CLASSIFICATION: <Unknown>
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: <Unknown>
;; FILING DATE: <Unknown>
;; ATTORNEY/AGENT INFORMATION:
;; NAME: MULLINS, J.G.
;; REGISTRATION NUMBER: 33,073
;; REFERENCE/DOCKET NUMBER: 640100-164 (97-011)
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 201-994-1744
;; TELEFAX: 201-994-1744

;; INFORMATION FOR SEQ ID NO: 14:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 284 AMINO ACIDS
;; TYPE: AMINO ACID
;; STRANDEDNESS: <Unknown>
;; TOPOLOGY: LINEAR
;; MOLECULE TYPE: PROTEIN
;; SEQUENCE DESCRIPTION: SEQ ID NO: 14:

US-09-165-827C-14
Query Match 13.1%; Score 58; DB 4; Length 284;
Best Local Similarity 29.3%; Pred. No. 25;
Matches 24; Conservative 11; Mismatches 45; Indels 2; Gaps 2;

QY 1 LPASSLSLVPQVTSYNGRTGLGDKNACIGTSICKKFKKEIRSDNNLASHGLP 60
Db 133 LPESCLGEHVPVPSYRSPYSALDKTHCSGANDFEAPF-EQRASLNPRAHLESPO 191

QY 61 -DSLLSYPNYSDSKIRPVE 81
Db 192 LGGKVSFPETPKSDSQTPAPMK 213

RESULT 23
US-09-165-827C-2
Sequence 2, Application US/09165827C
Patent No. 6358702
GENERAL INFORMATION:
APPLICANT: Timothy Connolly and Jian Zhang
TITLE OF INVENTION: Human Hox C10 and Polynucleotide Encoding Same
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
CECCHI, STEWART & OLSTEIN
STREET: 6 BECKER FARM ROAD
CITY: ROSELAND
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07068

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1

;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/165.827C
;; FILING DATE: 02-Oct-1998
;; CLASSIFICATION: <Unknown>
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: <Unknown>
;; FILING DATE: <Unknown>
;; ATTORNEY/AGENT INFORMATION:
;; NAME: MULLINS, J.G.
;; REGISTRATION NUMBER: 33,073
;; REFERENCE/DOCKET NUMBER: 640100-164 (97-011)
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 201-994-1744
;; TELEFAX: 201-994-1744

;; INFORMATION FOR SEQ ID NO: 14:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 342 AMINO ACIDS
;; TYPE: AMINO ACID
;; STRANDEDNESS: <Unknown>
;; TOPOLOGY: LINEAR
;; MOLECULE TYPE: PROTEIN
;; SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-165-827C-2
Query Match 13.1%; Score 58; DB 3; Length 307;
Best Local Similarity 34.2%; Pred. No. 11e+02;
Matches 25; Conservative 10; Mismatches 30; Indels 8; Gaps 3;

QY 3 ASSLSLVPQ--VRTSYNGRTGLG-LDKC-----NACIGTSICKKFKKEIRSDNWLAS 54
Db 600 ASSLSLQKQEGATSDNFMQAFNLVDQCKLEVDIPKVSYLQAFARAIISLVST 659

QY 55 HLGPPDPSLLSY 67
Db 660 ELAQPLESGTHFP 672

;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/165.827C
;; FILING DATE: 02-Oct-1998
;; CLASSIFICATION: <Unknown>
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: <Unknown>
;; FILING DATE: <Unknown>
;; ATTORNEY/AGENT INFORMATION:
;; NAME: MULLINS, J.G.
;; REGISTRATION NUMBER: 33,073
;; REFERENCE/DOCKET NUMBER: 640100-164 (97-011)
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 201-994-1700
;; TELEFAX: 201-994-1744

;; INFORMATION FOR SEQ ID NO: 2:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 342 AMINO ACIDS
;; TYPE: AMINO ACID
;; STRANDEDNESS: <Unknown>
;; TOPOLOGY: LINEAR
;; MOLECULE TYPE: PROTEIN
;; SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-165-827C-2
Query Match 13.1%; Score 58; DB 4; Length 342;
Best Local Similarity 29.3%; Pred. No. 31;
Matches 24; Conservative 11; Mismatches 45; Indels 2; Gaps 2;

QY 1 LPASSLSLVPQVTSYNGRTGLGDKNACIGTSICKKFKKEIRSDNNLASHGLP 60
Db 133 LPESCLGEHVPVPSYRSPYSALDKTHCSGANDFEAPF-EQRASLNPRAHLESPO 191

QY 61 -DSLLSYPNYSDSKIRPVE 81
Db 192 LGGKVSFPETPKSDSQTPAPMK 213

RESULT 24
US-08-990-140-4
Sequence 4, Application US/08990140A
Patent No. 6093795
GENERAL INFORMATION:
APPLICANT: Olsen, Henrik S.
APPLICANT: Ruben, Steven M.
APPLICANT: Sonenberg, Nahum
APPLICANT: Methot, Nathalie
APPLICANT: Rom, Eran
TITLE OF INVENTION: Human Ptl-like Subunit Protein (hprt1) and Human
FILE REFERENCE: 1488.0700001
CURRENT APPLICATION NUMBER: US/08/990.140A
CURRENT FILING DATE: 1997-12-12
EARLIER APPLICATION NUMBER: US 60/033,151
EARLIER FILING DATE: 1996-12-13
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 4
LENGTH: 907
TYPE: PRT
ORGANISM: Homo sapiens
US-08-990-140-4

Query Match 13.1%; Score 58; DB 3; Length 907;
Best Local Similarity 34.2%; Pred. No. 1.1e+02;
Matches 25; Conservative 10; Mismatches 30; Indels 8; Gaps 3;

QY 3 ASSLSLVPQ--VRTSYNGRTGLG-LDKC-----NACIGTSICKKFKKEIRSDNWLAS 54
Db 600 ASSLSLQKQEGATSDNFMQAFNLVDQCKLEVDIPKVSYLQAFARAIISLVST 659

QY 55 HLGPPDPSLLSY 67
Db 660 ELAQPLESGTHFP 672

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RESULT 27
US-09-543-681A-7181
; Sequence 7181, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILI
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543,681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 7181
; LENGTH: 1028
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-7181

Query Match 13.1%; Score 58; DB 4; Length 1028;
Best Local Similarity 27.6%; Pred. No. 1.3e+02;
Matches 24; Conservative 13; Mismatches 34; Indels 15; Gaps 4;

Qy 1 LPASSLSIVPQVTSYNGRTGLGDKNCACIGT-----SICKKFKKEIRSDNWLAS 54
Db 34 LPAQALPSL-----SHEPFGDLYLFEDEXENTLSTNDHQLSLSKEHAKGVQSLKWQYQ 88
Qy 55 HLGQLPDSL-LSYPANYSDDSKIWRPV 80
Db 89 ----PQSITLTANVNYQDDKNTATPL 111

RESULT 28
US-09-328-352-4500
; Sequence 4500, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 4500
; LENGTH: 381
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-4500

Query Match 13.0%; Score 57.5; DB 4; Length 381;
Best Local Similarity 27.1%; Pred. No. 42;
Matches 16; Conservative 12; Mismatches 24; Indels 7; Gaps 2;

Qy 3 ASSLSLVPQVTSYNGRTGLGDKNCACIGTSICKKFKKE-----EIRSDNWLASHL 56
Db 227 AATARAWLPAVELHYQFGKT--GVNKRFPYIGAVMYAFNDLKNNSGIEADLIQAGHM 283

RESULT 29
US-09-489-039A-10262
; Sequence 10262, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747

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; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 10262
; LENGTH: 896
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-10262

Query Match 13.0%; Score 57.5; DB 4; Length 896;
Best Local Similarity 25.6%; Pred. No. 1.3e+02;
Matches 23; Conservative 9; Mismatches 31; Indels 27; Gaps 4;
QY 1 LPASSLSL-----VPOVRTSYNFG--RTFLGLDKNACIGTSI-----CKKFF- 42
Db 290 LPADVAGVFYREFIAAPRAITLYTMGINSAGSDKCNALINVHLASGKYGRGCGFFSL 349
QY 43 -----KEIRSDNWLASHLGLPPDSL 63
Db 350 TQPNAMGGREVGGLATMLAAHMDVFEDDL 379

RESULT 30
US-09-644-600-10
; Sequence 10, Application US/09644600
; Patent No. 6451500
; GENERAL INFORMATION:
; APPLICANT: O'Brien, Timothy J.
; APPLICANT: Tanimoto, Hirotooshi
; TITLE OF INVENTION: TADG-15: An Extracellular Serine Protease
; TITLE OF INVENTION: Overexpressed in Carcinomas
; FILE REFERENCE: D6064C1P/D
; CURRENT APPLICATION NUMBER: US/09/644,600
; CURRENT FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 09/421,213
; PRIOR FILING DATE: 1999-10-20
; PRIOR APPLICATION NUMBER: 09/027,337
; PRIOR FILING DATE: 1998-02-20
; NUMBER OF SEQ ID NOS: 98
; SEQ ID NO 10
; LENGTH: 902
; TYPE: PRT
; ORGANISM: Mus musculus
; FEATURE:
; OTHER INFORMATION: Epithin
US-09-644-600-10

Query Match 13.0%; Score 57.5; DB 4; Length 902;
Best Local Similarity 27.9%; Pred. No. 1.3e+02;
Matches 17; Conservative 8; Mismatches 21; Indels 15; Gaps 3;
QY 15 TSYNFGRTFLGLDKNACIGTSICK--KFFKEIRSDNWLASHLGLPPDSLSPANYSD 72
Db 436 TDTGFLAEYLSYDSNDPCGMFMCKGRCIRKEIRCDGWADC-----PD-----YSD 482
QY 73 D 73
Db 483 E 483

Search completed: June 14, 2004, 08:02:34
Job time : 11.3358 secs

Result No.	Score	Query Match	Length	DB	ID	Description
1	444	100.0	182	9	US-09-7330-254-114	Sequence 114, App
2	444	100.0	182	9	US-09-904-615-114	Sequence 114, App
3	444	100.0	182	9	US-09-965-528-10	Sequence 10, Appl
4	444	100.0	182	12	US-10-147-493-172	Sequence 172, App
5	444	100.0	182	12	US-10-145-137-172	Sequence 172, App
6	444	100.0	182	12	US-10-160-503-172	Sequence 172, App
7	444	100.0	182	12	US-10-211-462-217	Sequence 217, App
8	444	100.0	182	12	US-10-143-118-172	Sequence 172, App
9	444	100.0	182	12	US-10-144-993-172	Sequence 172, App
10	444	100.0	182	12	US-10-158-787-172	Sequence 172, App
11	444	100.0	182	12	US-09-969-984-10	Sequence 10, Appl
12	444	100.0	182	12	US-10-140-024-172	Sequence 172, App
13	444	100.0	182	12	US-10-140-808-172	Sequence 172, App
14	444	100.0	182	12	US-10-152-405-172	Sequence 172, App
15	444	100.0	182	12	US-10-157-852A-172	Sequence 172, App

89 444 100.0 182 14 US-10-157-782-172 Sequence 172, App
90 444 100.0 182 14 US-10-152-395-172 Sequence 172, App
91 444 100.0 182 14 US-10-125-926A-172 Sequence 172, App
92 444 100.0 182 14 US-10-125-930A-172 Sequence 172, App
93 444 100.0 182 14 US-10-127-831A-172 Sequence 172, App
94 444 100.0 182 14 US-10-127-837A-172 Sequence 172, App
95 444 100.0 182 14 US-10-127-838B-172 Sequence 172, App
96 444 100.0 182 14 US-10-127-842A-172 Sequence 172, App
97 444 100.0 182 14 US-10-127-843A-172 Sequence 172, App
98 444 100.0 182 14 US-10-127-845A-172 Sequence 172, App
99 444 100.0 182 14 US-10-127-846A-172 Sequence 172, App
100 444 100.0 182 14 US-10-127-848A-172 Sequence 172, App

ALIGNMENTS

RESULT 1
US-09-739-254-114
; Sequence 114, Application US/09739254
; Patent No. US20010021700A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/739,254
; CURRENT FILING DATE: 2000-12-19
; EARLIER FILING DATE: 2000-02-23
; EARLIER FILING DATE: 2000-02-23
; EARLIER FILING DATE: 2000-02-23
; EARLIER FILING DATE: 1999-08-24
; EARLIER FILING DATE: 1999-08-24
; EARLIER FILING DATE: 1998-08-25
; EARLIER FILING DATE: 1998-08-25
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-739-254-114

Query Match 100.0%; Score 444; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPQVTSYNGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVTSYNGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHLGLPP 91
Qy 61 DLSLSYPANYSDDSKIWRPVEIF 83
Db 92 DLSLSYPANYSDDSKIWRPVEIF 114

RESULT 2
US-09-904-615-114
; Sequence 114, Application US/09904615
; Patent No. US20020026040A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR FILING DATE: 2001-07-16
; PRIOR FILING DATE: 2000-02-23
; PRIOR FILING DATE: 2000-02-23
; PRIOR FILING DATE: 1998-08-25
; PRIOR FILING DATE: 1998-08-25
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170

; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-114

Query Match 100.0%; Score 444; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPQVTSYNGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVTSYNGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHLGLPP 91
Qy 61 DLSLSYPANYSDDSKIWRPVEIF 83
Db 92 DLSLSYPANYSDDSKIWRPVEIF 114

RESULT 3
US-09-965-528-10
; Sequence 10, Application US/09965528
; Publication No. US20020187523A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: LAL, Preeti
; APPLICANT: BURFORD, Neil
; APPLICANT: BANDMAN, Olga
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: AZIMZAI, Yalida
; APPLICANT: LU, Dyoung Aina M.
; APPLICANT: PATTERSON, Chandra
; TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES
; FILE REFERENCE: PF-0701 USA
; CURRENT APPLICATION NUMBER: US/09/965,528
; CURRENT FILING DATE: 2001-09-26
; PRIOR FILING DATE: 2001-09-26
; PRIOR FILING DATE: 1999-05-19
; PRIOR FILING DATE: 1999-05-19
; PRIOR FILING DATE: 1999-07-15
; PRIOR FILING DATE: 1999-07-15
; PRIOR FILING DATE: 1999-07-30
; PRIOR FILING DATE: 1999-10-04
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PERL Program
; SEQ ID NO 10
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20020187523A1 5090841CD1
US-09-965-528-10

Query Match 100.0%; Score 444; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPQVTSYNGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPQVTSYNGRTFLGLDKNCACIGTSICKKFFKEIRSDNWLASHLGLPP 91
Qy 61 DLSLSYPANYSDDSKIWRPVEIF 83
Db 92 DLSLSYPANYSDDSKIWRPVEIF 114

RESULT 4
US-10-147-493-172

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; Sequence 172, Application US/10147493
; Publication No. US2004029217A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330RIC345
; CURRENT APPLICATION NUMBER: US/10/147,493
; CURRENT FILING DATE: 2002-05-17
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-147-493-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVLPQVRTSYNFGRTFLGDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
DB 32 LPASSLSLVLPQVRTSYNFGRTFLGDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPNYSDSKIWRRPVEIF 83
DB 92 DSLLSYPNYSDSKIWRRPVEIF 114

RESULT 5
US-10-145-127-172
; Sequence 172, Application US/10145127
; Publication No. US20040033558A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330RIC252
; CURRENT APPLICATION NUMBER: US/10/145,127
; CURRENT FILING DATE: 2002-05-13

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVLPQVRTSYNFGRTFLGDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
DB 32 LPASSLSLVLPQVRTSYNFGRTFLGDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPNYSDSKIWRRPVEIF 83
DB 92 DSLLSYPNYSDSKIWRRPVEIF 114

RESULT 6
US-10-160-503-172
; Sequence 172, Application US/10160503
; Publication No. US20040033559A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330RIC446
; CURRENT APPLICATION NUMBER: US/10/160,503
; CURRENT FILING DATE: 2002-05-30
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-160-503-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVLPQVRTSYNFGRTFLGDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 60
DB 32 LPASSLSLVLPQVRTSYNFGRTFLGDKCNACIGTSICKKFKKEIRSDNWLASHLGLPP 91

QY 61 DSLLSYPNYSDSKIWRRPVEIF 83
DB 92 DSLLSYPNYSDSKIWRRPVEIF 114

RESULT 7
US-10-211-462-217
; Sequence 217, Application US/10211462
; Publication No. US20040033495A1
; GENERAL INFORMATION:
```

APPLICANT: Murray, Richard
APPLICANT: Glynn, Richard
APPLICANT: Watson, Susan R.
APPLICANT: Aziz, Natasha
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis, Compositions and
FILE REFERENCE: 018501-006200US
CURRENT APPLICATION NUMBER: US/10/211,462
CURRENT FILING DATE: 2003-02-13
PRIOR APPLICATION NUMBER: US 09/784,356
PRIOR FILING DATE: 2001-02-14
PRIOR APPLICATION NUMBER: US 09/791,390
PRIOR FILING DATE: 2001-02-22
PRIOR APPLICATION NUMBER: US 60/310,025
PRIOR FILING DATE: 2001-08-03
PRIOR APPLICATION NUMBER: US 60/334,244
PRIOR FILING DATE: 2001-11-29
NUMBER OF SEQ ID NOS: 230
SOFTWARE: PatentIt Ver. 2.1
SEQ ID NO 217
LENGTH: 182
TYPE: PRT
ORGANISM: Homo sapiens
US-10-211-462-217

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLPQVQRTSYNFGRTFLGLDKCNACIGTSCKFFKEIRSDNWLASHLGLPP 60
DB 32 LPASSLSLPQVQRTSYNFGRTFLGLDKCNACIGTSCKFFKEIRSDNWLASHLGLPP 91
QY 61 DLSLSPANYSDSKIRPVEIF 83
DB 92 DLSLSPANYSDSKIRPVEIF 114

RESULT 8
US-10-143-118-172
Sequence 172, Application US/10143118
Publication No. US20040038335A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C228
CURRENT APPLICATION NUMBER: US/10/143,118
CURRENT FILING DATE: 2002-05-09
Prior Application removed - See Palm or File Wrapper
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-143-118-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLPQVQRTSYNFGRTFLGLDKCNACIGTSCKFFKEIRSDNWLASHLGLPP 60
DB 32 LPASSLSLPQVQRTSYNFGRTFLGLDKCNACIGTSCKFFKEIRSDNWLASHLGLPP 91
QY 61 DLSLSPANYSDSKIRPVEIF 83
DB 92 DLSLSPANYSDSKIRPVEIF 114

RESULT 9
US-10-144-993-172
Sequence 172, Application US/10144993
Publication No. US20040038336A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C261
CURRENT APPLICATION NUMBER: US/10/144,993
CURRENT FILING DATE: 2002-05-13
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-144-993-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LPASSLSLPQVQRTSYNFGRTFLGLDKCNACIGTSCKFFKEIRSDNWLASHLGLPP 60
DB 32 LPASSLSLPQVQRTSYNFGRTFLGLDKCNACIGTSCKFFKEIRSDNWLASHLGLPP 91
QY 61 DLSLSPANYSDSKIRPVEIF 83
DB 92 DLSLSPANYSDSKIRPVEIF 114

RESULT 10
US-10-158-787-172
Sequence 172, Application US/10158787
Publication No. US20040039164A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang


```
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C449
; CURRENT APPLICATION NUMBER: US/10/158,787
; CURRENT FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-10-158-787-272

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPQVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 60
    |||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 91
    |||||

Qy 61 DLSLSYPANYSDDSKIMRPVEIF 83
    |||||
Db 92 DLSLSYPANYSDDSKIMRPVEIF 114
    |||||

RESULT 12
US-10-140-024-172
; Sequence 172, Application US/10140024
; Publication No. US20040058424A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C69
; CURRENT APPLICATION NUMBER: US/10/140,024
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-10-140-024-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LPASSLSLVPQVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 60
    |||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 91
    |||||

Qy 61 DLSLSYPANYSDDSKIMRPVEIF 83
    |||||
Db 92 DLSLSYPANYSDDSKIMRPVEIF 114
    |||||

RESULT 11
US-09-969-984-10
; Sequence 10, Application US/09969984
; Publication No. US20040048244A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: LAL, Preeti
; APPLICANT: BURFORD, Neil
; APPLICANT: BANDMAN, Olga
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: AZIMZAI, Yalda
; APPLICANT: LU, Dying Aina M.
; APPLICANT: PATTERSON, Chandra
; TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES
```



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; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-127-852A-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVQVQRTSYNFGRTFLGLKKNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
   |||||
Db 32 LPASSLSLVQVQRTSYNFGRTFLGLKKNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
   |||||

QY 61 DLSLSPANYSDSKIWPRVEIF 83
   |||||
Db 92 DLSLSPANYSDSKIWPRVEIF 114
   |||||

RESULT 16
US-10-127-900A-172
; Sequence 172, Application US/10127900A
; Publication No. US20030203429A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mazy E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C81
; CURRENT APPLICATION NUMBER: US/10127,900A
; CURRENT FILING DATE: 2002-10-15
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182

```

Best Local Similarity 100.0%; Pred. No. 4.2e-47; Mismatches 0; Indels 0; Gaps 0;
Matches 83; Conservative 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

QY 61 DSLSYPANYSDSKIWPRVEIF 83
DB 92 DSLSYPANYSDSKIWPRVEIF 114

RESULT 13

US-10-131-820A-172
; Sequence 172, Application US/10131820A
; Publication No. US20030203431A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Beresini, Maureen

APPLICANT: Deforge, Laura

APPLICANT: Desnoyers, Luc

APPLICANT: Filvaroff, Ellen

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Gurney, Austin L.

APPLICANT: Sherwood, Steven

APPLICANT: Smith, Victoria

APPLICANT: Stewart, Timothy A.

APPLICANT: Tumas, Daniel

APPLICANT: Watanabe, Colin K

APPLICANT: Wood, William

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

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APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

Query Match 100.0%; Score 444; DB 12; Length 182;

Best Local Similarity 100.0%; Pred. No. 4.2e-47;

Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

QY 61 DSLSYPANYSDSKIWPRVEIF 83

DB 92 DSLSYPANYSDSKIWPRVEIF 114

RESULT 19

US-10-142-886-172

; Sequence 172, Application US/10142886

; Publication No. US20030203432A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Beresini, Maureen

APPLICANT: Deforge, Laura

APPLICANT: Desnoyers, Luc

APPLICANT: Filvaroff, Ellen

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Gurney, Austin L.

APPLICANT: Sherwood, Steven

APPLICANT: Smith, Victoria

APPLICANT: Stewart, Timothy A.

APPLICANT: Tumas, Daniel

APPLICANT: Watanabe, Colin K

APPLICANT: Wood, William

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

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APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

APPLICANT: Zhang, Zemin

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60

DB 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91

QY 61 DSLSYPANYSDSKIWPRVEIF 83

DB 92 DSLSYPANYSDSKIWPRVEIF 114

RESULT 20

US-10-146-728-172

; Sequence 172, Application US/10146728

; Publication No. US20030203437A1

GENERAL INFORMATION:

APPLICANT: Baker, Kevin P.

APPLICANT: Beresini, Maureen

APPLICANT: Deforge, Laura

APPLICANT: Desnoyers, Luc

APPLICANT: Filvaroff, Ellen

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, Audrey

APPLICANT: Godowski, Paul J.

APPLICANT: Gurney, Austin L.

APPLICANT: Sherwood, Steven

APPLICANT: Smith, Victoria

APPLICANT: Stewart, Timothy A.

APPLICANT: Stewart, Timothy A.

APPLICANT: Stewart, Timothy A.

APPLICANT: Stewart, Timothy A.

APPLICANT: Stewart, Timothy A.

APPLICANT: Stewart, Timothy A.

APPLICANT: Stewart, Timothy A.

APPLICANT: Stewart, Timothy A.

```
; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C321
; CURRENT APPLICATION NUMBER: US/10/146,728
; PRIOR APPLICATION REMOVED - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-146-728-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPP 91

QY 61 DSLSYPANYSDSDSKIWPRVEIF 83
Db 92 DSLSYPANYSDSDSKIWPRVEIF 114

RESULT 21
US-10-146-786-172
; Sequence 172, Application US/10146786
; Publication No. US20030203438A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Smith, Victoria
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William
; APPLICANT: Watanabe, Colin K
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C348
; CURRENT APPLICATION NUMBER: US/10/147,499
; CURRENT FILING DATE: 2002-05-17
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-147-499-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPP 91

QY 61 DSLSYPANYSDSDSKIWPRVEIF 83
Db 92 DSLSYPANYSDSDSKIWPRVEIF 114

RESULT 23
US-10-157-798-172
; Sequence 172, Application US/10157798
; Publication No. US20030203440A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
```

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QY 61 DSLSYPANYSDSDSKIWPRVEIF 83
Db 92 DSLSYPANYSDSDSKIWPRVEIF 114

RESULT 22
US-10-147-499-172
; Sequence 172, Application US/10147499
; Publication No. US20030203439A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C348
; CURRENT APPLICATION NUMBER: US/10/147,499
; CURRENT FILING DATE: 2002-05-17
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-147-499-172

Query Match      100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLPQVRTSYNFGRTFLGLDKCNACIGTSICKFFKEIRSDNWLASHLGLPP 91

QY 61 DSLSYPANYSDSDSKIWPRVEIF 83
Db 92 DSLSYPANYSDSDSKIWPRVEIF 114

RESULT 23
US-10-157-798-172
; Sequence 172, Application US/10157798
; Publication No. US20030203440A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
```

```
; APPLICANT: Wood,William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P330R1C443
; CURRENT APPLICATION NUMBER: US/10/157,798
; CURRENT FILING DATE: 2002-05-29
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-157-798-172

Query Match 100.0%; Score 444; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLPQVTSYNGRTFLGLDKNCACIGTSICKKFFKEEIBSDNWLASHLGLPP 60
Db 32 LPASSLSLPQVTSYNGRTFLGLDKNCACIGTSICKKFFKEEIBSDNWLASHLGLPP 91
QY 61 DSSLSPANYSDSDSKWRPVEIF 83
Db 92 DSSLSPANYSDSDSKWRPVEIF 114

RESULT 24
US-10-028-072-172
; Sequence 172, Application US/10028072
; Publication No US20030004311A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang
; TITLE OF INVENTION:
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/028,072
; CURRENT FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059836
; PRIOR FILING DATE: 1997-09-24
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062285
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062287
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062814
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/062816
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063045
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063082
; PRIOR FILING DATE: 1997-10-31
; PRIOR APPLICATION NUMBER: 60/063127
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/063327
; PRIOR FILING DATE: 1997-10-27
; PRIOR APPLICATION NUMBER: 60/063329
; PRIOR FILING DATE: 1997-10-27
; PRIOR APPLICATION NUMBER: 60/063550
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063561
; PRIOR FILING DATE: 1997-10-28
; PRIOR APPLICATION NUMBER: 60/063704
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063733
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063735
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063738
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063755
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064248
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/064809
; PRIOR FILING DATE: 1997-11-07
; PRIOR APPLICATION NUMBER: 60/065186
; PRIOR FILING DATE: 1997-11-12
; PRIOR APPLICATION NUMBER: 60/065846
; PRIOR FILING DATE: 1997-11-17
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/066453
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/066511
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/066770
; PRIOR FILING DATE: 1997-11-24
; PRIOR APPLICATION NUMBER: 60/069212
; PRIOR FILING DATE: 1997-12-11
; PRIOR APPLICATION NUMBER: 60/069278
; PRIOR FILING DATE: 1997-12-11
; PRIOR APPLICATION NUMBER: 60/069334
; PRIOR FILING DATE: 1997-12-11
; PRIOR APPLICATION NUMBER: 60/069694
; PRIOR FILING DATE: 1997-12-16
; PRIOR APPLICATION NUMBER: 60/072320
; PRIOR FILING DATE: 1998-01-23
; PRIOR APPLICATION NUMBER: 60/073612
; PRIOR FILING DATE: 1998-02-04
; PRIOR APPLICATION NUMBER: 60/074086
; PRIOR FILING DATE: 1998-02-09
; PRIOR APPLICATION NUMBER: 60/074092
; PRIOR FILING DATE: 1998-02-09
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
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Qy	1	LPASSLSL	VPQV	RTSYN	FGRTP	GLDKN	ACIGT	TSIC	CKFP	KEE	IRSON	WLASH	GLPP	60
Db	32	LPASSLSL	VPQV	RTSYN	FGRTP	GLDKN	ACIGT	TSIC	CKFP	KEE	IRSON	WLASH	GLPP	91
Qy	61	DSL	SY	PAN	YSD	DS	KI	WR	PVE	IF	83			
Db	92	DSL	SY	PAN	YSD	DS	KI	WR	PVE	IF	114			

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RESULT 26
US-10-123-904-172
; Sequence 172, Application US/10123904
; Publication No. US20030022328A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddard, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C54
; CURRENT APPLICATION NUMBER: US/10/123,904
; CURRENT FILING DATE: 2002-04-16
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-123-904-172

Query Match      100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
   |||||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
   |||||||

QY 61 DSLSLYPANYSDDSKIWPRVEIF 83
   |||||||
Db 92 DSLSLYPANYSDDSKIWPRVEIF 114
   |||||||

RESULT 27
US-10-140-470-172
; Sequence 172, Application US/10140470
; Publication No. US20030022331A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddard, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C160
; CURRENT APPLICATION NUMBER: US/10/175,746
; CURRENT FILING DATE: 2002-06-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-175-746-172

Query Match      100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
   |||||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
   |||||||

QY 61 DSLSLYPANYSDDSKIWPRVEIF 83
   |||||||
Db 92 DSLSLYPANYSDDSKIWPRVEIF 114
   |||||||

RESULT 28
US-10-175-746-172
; Sequence 172, Application US/10175746
; Publication No. US20030027270A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Goddard, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C353
; CURRENT APPLICATION NUMBER: US/10/175,746
; CURRENT FILING DATE: 2002-06-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-175-746-172

Query Match      100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
   |||||||
Db 32 LPASSLSLVPQVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
   |||||||

QY 61 DSLSLYPANYSDDSKIWPRVEIF 83
   |||||||
Db 92 DSLSLYPANYSDDSKIWPRVEIF 114
   |||||||
```



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; Sequence 172, Application US/10176918
; Publication No. US20030027275A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowsky, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C382
; CURRENT APPLICATION NUMBER: US/10/176,918
; CURRENT FILING DATE: 2002-06-20
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-918-172

Query Match      100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 60
QY 61 DSLLSYPNYSDSDSKIWPRVEIF 83
Db 92 DSLLSYPNYSDSDSKIWPRVEIF 114

Search completed: June 14, 2004, 08:05:37
Job time : 25.7434 secs

; Sequence 172, Application US/10176921
; Publication No. US20030027276A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowsky, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C288
; CURRENT APPLICATION NUMBER: US/10/176,921
; CURRENT FILING DATE: 2002-06-20

US-10-176-921-172

Query Match      100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 60
QY 61 DSLLSYPNYSDSDSKIWPRVEIF 83
Db 92 DSLLSYPNYSDSDSKIWPRVEIF 114

RESULT 30
US-10-176-921-172
; Sequence 172, Application US/10176921
; Publication No. US20030027276A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowsky, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C288
; CURRENT APPLICATION NUMBER: US/10/176,921
; CURRENT FILING DATE: 2002-06-20
```

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; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-921-172

Query Match      100.0%; Score 444; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-47;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 60
Db 32 LPASSLSLVPOVRTSYNFGRTFLGLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPP 60
QY 61 DSLLSYPNYSDSDSKIWPRVEIF 83
Db 92 DSLLSYPNYSDSDSKIWPRVEIF 114

Search completed: June 14, 2004, 08:05:37
Job time : 25.7434 secs
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: June 14, 2004, 07:56:30 ; Search time 8.4566 Seconds
(without alignments)

944.102 Million cell updates/sec

Title: JS-10-054-988-114_COPY_32_114

Perfect score: 444

Sequence: 1 LPASSLSLVFQVTSYNGF.....LSYPANYSDSKIMRPVIF 83

Scoring table: BLOSUM62

Gapop 13.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 100 summaries

Database :

PIR_78.*

1: pir1.*

2: pir2.*

3: pir3.*

4: pir4.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	72.5	16.3	424	2 AB1034	UV protection prot
2	70	15.8	739	2 T25030	hypothetical prote
3	69.5	15.7	534	2 AB0392	probable carbohydr
4	68.5	15.4	424	2 B38176	sam8 protein - Sal
5	68	15.3	985	2 T41135	hypothetical prote
6	67.5	15.2	390	2 S56560	hypothetical 43.6K
7	67.5	15.2	390	2 B91291	hypothetical prote
8	67.5	15.2	390	2 D86132	hypothetical prote
9	67	15.1	279	1 B40731	alcohol dehydrogen
10	66.5	15.0	424	2 JQ0661	impB protein - Sal
11	66	14.9	736	2 T51691	dishevelled homolo
12	65.5	14.8	572	2 AD1209	N-acetyluramoyl-L
13	65.5	14.8	1084	1 S19661	DNA-directed DNA p
14	65.5	14.8	1086	2 T43266	DNA-directed DNA p
15	65.5	14.8	1086	2 T40242	DNA polymerase del
16	64.5	14.5	145	2 H88504	protein B0361.1 fi
17	64.5	14.5	226	2 T49719	hypothetical prote
18	64	14.4	395	2 T38113	hypothetical serin
19	63.5	14.3	473	1 RGYM13	regulatory protein
20	63.5	14.3	473	2 T28118	hypothetical prote
21	63	14.2	513	1 T02259	calcium-dependent
22	63	14.2	673	1 S73444	MG032 homolog B01
23	62	14.0	414	2 T15494	aspartate transami
24	62	14.0	452	2 T48998	hypothetical prote
25	61.5	13.9	676	2 AH2195	hypothetical prote
26	61	13.7	325	2 S65306	hypothetical prote
27	61	13.7	1585	2 B69948	phage-related prot
28	60.5	13.6	192	2 T64081	glpG protein homol
29	60.5	13.6	343	2 A75597	mannosyltransferas

30	60.5	13.6	533	1 S56652	calcium-dependent
31	60.5	13.6	677	2 AE1861	serine/threonine k
32	60	13.5	416	2 S52827	hypothetical prote
33	60	13.5	438	2 T32114	hypothetical prote
34	60	13.5	831	2 S44843	K06H7.3 protein -
35	60	13.5	1071	2 T18307	suppressor protein
36	60	13.5	1203	2 T04294	hypothetical prote
37	60	13.5	1633	2 T01879	hypothetical prote
38	59.5	13.4	346	2 T30463	hypothetical prote
39	59.5	13.4	508	2 P86458	unknown protein, 7
40	59.5	13.4	1053	2 S72194	hydroxymethylgluta
41	59.5	13.4	1186	2 T42728	histocompatibility
42	59.5	13.4	1212	2 T42387	histocompatibility
43	59.5	13.4	1331	2 T04938	hypothetical prote
44	59.5	13.4	1495	2 A85240	hypothetical prote
45	59.5	13.4	1495	2 T10649	hypothetical prote
46	59	13.3	98	2 S78727	protein YLL018C-a
47	59	13.3	105	2 S69879	hypothetical prote
48	59	13.3	123	2 AD0255	probable phage ant
49	59	13.3	342	2 A56552	homeotic protein H
50	59	13.3	371	2 T02102	hypothetical prote
51	59	13.3	386	2 S74778	hypothetical prote
52	59	13.3	482	2 T25327	hypothetical prote
53	59	13.3	511	2 E75561	probable phytoene
54	59	13.3	861	2 B49847	nitrate reductase
55	58.5	13.2	129	2 T22430	hypothetical prote
56	58.5	13.2	173	2 S73112	hypothetical prote
57	58.5	13.2	367	2 E75384	conserved hypotet
58	58.5	13.2	425	2 S26623	phosphoglycerate k
59	58.5	13.2	432	2 T06341	acetyl-CoA carboxy
60	58.5	13.2	481	2 T31817	hypothetical prote
61	58.5	13.2	602	2 E64464	hypothetical prote
62	58.5	13.2	640	2 S69546	phosphoenolpyruvat
63	58.5	13.2	1986	2 S28353	probable polyketid
64	58	13.1	86	2 AF0828	probable ferredoxi
65	58	13.1	439	2 T15748	hypothetical prote
66	58	13.1	501	2 T49081	serine-type carbox
67	58	13.1	529	2 G84295	hypothetical prote
68	58	13.1	1197	1 G65010	sensor protein evg
69	57.5	13.0	470	2 S58826	hypothetical prote
70	57.5	13.0	525	1 SYEGGU	GMP synthetase (im
71	57.5	13.0	525	2 A91050	GMP synthetase (im
72	57.5	13.0	525	2 P85894	GMP synthetase (g
73	57.5	13.0	525	2 AF0349	GMP synthetase (glu
74	57.5	13.0	525	2 AD0820	GMP synthetase (glu
75	57.5	13.0	630	2 S71148	hypothetical prote
76	57.5	13.0	840	2 G98169	hypothetical prote
77	57.5	13.0	840	2 AF3117	hypothetical prote
78	57.5	13.0	1023	2 T31669	neural zinc finger
79	57	12.8	201	2 F36861	orf5 protein - Lel
80	57	12.8	255	2 C82578	3-alpha-hydroxyste
81	57	12.8	277	2 E72564	hypothetical prote
82	57	12.8	397	2 E86304	F611.9 protein - A
83	57	12.8	402	2 A11853	sodium-dependent n
84	57	12.8	412	2 T10671	protein kinase hom
85	57	12.8	510	2 T39930	replication protei
86	57	12.8	514	2 T25509	hypothetical prote
87	57	12.8	781	2 JCT382	DNA-directed DNA p
88	57	12.8	1835	2 T54323	sodium channel alp
89	57	12.8	1836	2 JSC648	sodium channel alp
90	57	12.8	1836	2 T51964	sodium channel alp
91	57	12.8	1836	2 T64893	sodium channel alp
92	56.5	12.7	349	2 A29054	alcohol dehydrogen
93	56.5	12.7	394	2 E70135	flagellar protein
94	56.5	12.7	404	2 A42677	interleukin-1 beta
95	56.5	12.7	426	2 T05576	hypothetical prote
96	56.5	12.7	426	2 D95893	hypothetical trans
97	56.5	12.7	428	2 T34358	zinc finger protei
98	56.5	12.7	472	2 T43084	transfer complex p
99	56.5	12.7	552	2 AB0516	probable ABC trans
100	56.5	12.7	618	2 A71364	probable phosphoen

QY 7 SSLVPOVRTSY-----NFGRTFLG-LCKN-ACIGTSICKK-----F 41
DB 26 TQILPLRGHYRIKVLSDGGFGRTYLSBDIDKLNELCVKGFAPKQVSHSMMKAVEL 85
QY 42 FKEEIRSDNLWASHGLGPPDLSLSY 66
DB 86 FKQEAQPLQHLGHHQIP-TLLAY 108

RESULT 26
S65306
hypothetical protein YPL273w - yeast (Saccharomyces cerevisiae)
N;Alternate names: hypothetical protein P0338
C;Species: Saccharomyces cerevisiae
C;Date: 10-Dec-1994 #sequence_revision 31-May-1996 #text_change 19-Apr-2002
C;Accession: S65306; S65327
R;Duesterhoeft, A.; Floeth, M.; Fritzt, M.; Hilbert, H.; Moestl, D.
submitted to the Protein Sequence Database, May 1996
A;Reference number: S65292
A;Accession: S65306
A;Molecule type: DNA
A;Residues: 1-325 <DUE>
A;Cross-references: EMBL:Z73629; NID:g1370562; PID:e246979; PID:g1370563; MIPS:YPL273w
A;Experimental source: strain S288C (AB972)
R;Dallus, H.; Hebling, U.
submitted to the Protein Sequence Database, May 1996
A;Reference number: S64967
A;Accession: S65327
A;Molecule type: DNA
A;Residues: 1-325
A;Cross-references: EMBL:Z73629; NID:g1370562; PID:e246979; PID:g1370563; MIPS:YPL273w
A;Experimental source: strain S288C (AB972)
C;Genetics:
A;Gene: SGD:SAM4
A;Cross-references: SGD:S0006134
A;Map position: 16L

Query Match 13.7%; Score 61; DB 2; Length 325;
Best Local Similarity 25.6%; Pred. No. 35;
Matches 20; Conservative 16; Mismatches 24; Indels 18; Gaps 4;

QY 6 LSSLVPOVRTSYNFGRTFLGDKNACIGTSICKKFFKEEIRSDNLWASHGLGPPDLSL 64
DB 217 IAQVIGLGDKNINFSFLGIN-----CVSFN-----QSPDILESQAEPNNMALL 262

QY 65 SYPAN-----YSDDSKIWRP 79
DB 263 AYPNSGEVYDTEKKIWL 230

RESULT 27
B69948
phage-related protein homolog yqbo - Bacillus subtilis
C;Species: Bacillus subtilis
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 15-Oct-1999
C;Accession: B69948
R;Kunst, F.; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Berte
C.; Bron, S.; Brouillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Ch
A.; Ehrlich, S.D.; Emerson, P.F.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E.
Nature 390, 249-256, 1997
A;Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Gall
lech, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holsappel, S.; Hosono, S.; Hullo, M.F.
Koetter, P.; Koningsstein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidus, A.; Lardin
A;Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masuda, S.; Maue
Y, M.; Ogawa, K.; Ogawara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetel
Rieger, M.; Rivolta, C.; Rocha, E.; Roche, B.; Rose, M.; Sadale, Y.; Sato, T.; Scanlon
A;Authors: Schleich, S.; Schroeter, R.; Scoffone, P.; Sekiguchi, J.; Sekowska, A.; Seron
akeuchi, M.; Tamakoshi, A.; Tanaka, T.; Terpstera, P.; Tognoni, A.; Tosato, V.; Uchiyama
T.; Winters, P.; Wipat, A.; Yamamoto, H.; Yanane, K.; Yasumoto, K.; Yata, K.; Yoshida, K
A;Authors: Yoshikawa, H.F.; Zumstein, E.; Yoshikawa, H.; Danchin, A. Bacillus subtilis.
A;Title: The complete genome sequence of the Gram-positive bacterium
A;Reference number: A69580; MUID:98044033; PMID:9384377

A;Accession: B69948
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-1585 <KUN>
A;Cross-references: GB:Z99117; GB:AL009126; NID:g2634966; PIDN:CAB14544.1; PID:el18383
A;Experimental source: strain 168
C;Genetics:
A;Gene: yqbo

Query Match 13.7%; Score 61; DB 2; Length 1585;
Best Local Similarity 25.4%; Pred. No. 1.9e+02;
Matches 19; Conservative 14; Mismatches 27; Indels 12; Gaps 3;

QY 3 ASSLSLVPOVRTSYNFGRTFLGDKNACIGTSICKKFF---FKEEIRS-DNWLASHGL 58
DB 1109 AAVTASVPIIDTS-----SLDEQATSGQQFTKSFQDQIRDNVVSMKQKNVQG 1160

QY 59 PPSLSLSYPANY 70
DB 1161 PMNNLSYSPNY 1172

RESULT 28
I64081
gIPG protein homolog - Haemophilus influenzae (strain Rd KW20)
C;Species: Haemophilus influenzae
C;Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 08-Oct-1999
C;Accession: I64081
R;Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage,
Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman,
D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M.
Science 269, 496-512, 1995
A;Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Venter
A;Title: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd.
A;Reference number: A64000; MUID:95350630; PMID:7542800
A;Accession: I64081
A;Status: nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-192 <TIGR>
A;Cross-references: GB:U32744; GB:L42023; NID:g1573608; PIDN:AAC22277.1; PID:g1573612;

Query Match 13.6%; Score 60.5; DB 2; Length 192;
Best Local Similarity 30.0%; Pred. No. 22;
Matches 18; Conservative 7; Mismatches 24; Indels 11; Gaps 2;

QY 21 RTFLGDKNACIGTSICKKFFKEEIRSDNLWASHGLGPPD--SLSYPANYSDSKIWR 78
DB 2 KNFLAQQKQITLITLALCVLIY-----LAQQLGFEDDIMLHYPAYEEQDSVWR 52

RESULT 29
A75597
mannosyltransferase - Deinococcus radiodurans (strain R1)
C;Species: Deinococcus radiodurans
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 31-Mar-2000
C;Accession: A75597
R;White, O.; Eissen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.
M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.;
S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
A;Title: Genome sequence of the radioresistant bacterium Deinococcus radiodurans R1.
A;Reference number: A75250; MUID:20036896; PMID:10567266
A;Accession: A75597
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-343 <WHI>
A;Cross-references: GB:AB001862; GB:AE001825; NID:96460468; PIDN:AAF12270.1; PID:96460
A;Experimental source: strain R1
C;Genetics:
A;Gene: DRA0039
A;Map position: 2

Query Match 13.6%; Score 60.5; DB 2; Length 343;

Best Local Similarity 40.0%; Pred. No. 42;
Matches 14; Conservative 6; Mismatches 12; Indels 3; Gaps 1;
QY 48 SDNWLASHLGLPPDLSLLSYPNYSDDSKIWPRPVEI 82
Db 121 SKRIVSHLGVSPDKITVPL---AASKIFRPDPL 152

RESULT 30
S56652
calcium-dependent protein kinase (EC 2.7.1.1-) 2 - rice
C;Species: Oryza sativa (rice)
C;Date: 14-May-1999 #sequence_revision 14-May-1999 #text_change 11-Jun-1999
C;Accession: S56652
R;Breviario, D.; Morello, L.; Gianì, S.
Plant Mol. Biol. 27, 953-967, 1995
A;Title: Molecular cloning of two novel rice cDNA sequences encoding putative calcium-de
A;Reference number: S56651; MUID:95284352; PMID:7766885
A;Accession: S56652
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-533 <BRE>
A;Cross-references: EMBL:X81394; NID:9587497; PID:CAA57157.1; PID:9587498
C;Superfamily: calcium-dependent protein kinase; calmodulin repeat homology; protein kin
C;Keywords: ATP; calcium binding; EF hand; phosphotransferase; serine/threonine-specific
F;83-343/Domain: protein kinase ATP-binding motif
F;91-99/Region: protein kinase ATP-binding motif
F;385-417/Domain: calmodulin repeat homology <EF1>
F;421-453/Domain: calmodulin repeat homology <EF2>
F;457-489/Domain: calmodulin repeat homology <EF3>
F;492-524/Domain: calmodulin repeat homology <EF4>
F;114/Active site: Lys #status predicted

Query Match 13.6%; Score 60.5; DB 1; Length 533;
Best Local Similarity 22.7%; Pred. No. 68;
Matches 22; Conservative 17; Mismatches 41; Indels 17; Gaps 3;
QY 2 PASSLSLIVPOVRTSYN-----PGRFTGLD-----KNCACIGTSCIKKPFKEE 45
Db 70 PDIILGKLYDDVRSVYSLGKELGRGQGVTVLCTEIASGKQYACKSISKRLVSKADKED 129

QY 46 IRSNWLASHLGLPPDLSLLSYPNYSDDSKIWPRPVEI 82
Db 130 IRREIQIMQHLIS-GQQNIVEFRGAYEDKSNVHVVMEL 165

Search completed: June 14, 2004, 08:01:03
Job time : 9.4566 secs

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OM protein - protein search, using sw model

Run on: June 14, 2004, 07:51:35 ; Search time 6.57736 Seconds

(without alignments)

657.076 Million cell updates/sec

Title: US-10-054-988-114_COPY_32_114

Perfect score: 444

Sequence: 1 LPASLSLPPQVRTSYNFG.....LSYPANYSDSKWRPVEIF 83

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 3.5

Searched: 141681 seqs, 52070155 residues

Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 3%

Maximum Match 100%

Listing first 100 summaries

Database : SwissProt_42.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	68.5	15.4	424	1	SAMB_SALTY
2	67.5	15.2	373	1	YUIM_ECOLI
3	67	15.1	279	1	ADHR_DROGU
4	66.5	15.0	424	1	IMPB_SALTY
5	66	14.9	736	1	DYLD_XENLA
6	65.5	14.8	1086	1	DPD_SCHPO
7	64	14.4	385	1	YDI6_SCHPO
8	64	14.4	889	1	C122_HUMAN
9	63.5	14.3	473	1	MA6R_YEAST
10	63.5	14.3	473	1	Y581_CAEEL
11	63	14.2	513	1	CDP2_MAIZE
12	63	14.2	673	1	YA36_MYCPN
13	62.5	14.1	567	1	GPV_RAT
14	62	14.0	342	1	HXCA_HUMAN
15	61	13.7	1585	1	YBOB_BACSU
16	60.5	13.6	192	1	GLPG_HAEIN
17	60.5	13.6	533	1	CDP2_ORYSA
18	60	13.5	416	1	YMW7_YEAST
19	60	13.5	618	1	YMK3_CAEEL
20	60	13.5	1071	1	SFE1_KLULA
21	59.5	13.4	488	1	PAC2_RAT
22	59.5	13.4	497	1	G6PI_LEGPN
23	59.5	13.4	713	1	ZBT1_HUMAN
24	59.5	13.4	713	1	ZBT1_MOUSE
25	59.5	13.4	1053	1	HNDH_SCHPO
26	59.5	13.4	1212	1	UTY_MOUSE
27	59	13.3	105	1	YW99_YEAST
28	59	13.3	329	1	RECA_MYCPE
29	59	13.3	342	1	HXCA_MOUSE
30	58.5	13.2	173	1	YC37_PORPU
31	58.5	13.2	432	1	ACCD_SOYEN
32	58.5	13.2	433	1	PGKH_SPIOL
33	58.5	13.2	618	1	PPCK_BORBR

34	58.5	13.2	618	1	PPCK_BORPA
35	58.5	13.2	640	1	PPCM_HUMAN
36	58.5	13.2	866	1	NASA_KLEOX
37	58.5	13.2	1986	1	WA EMENI
38	58	13.1	907	1	I4G2_HUMAN
39	58	13.1	1197	1	KVGS_ECOLI
40	57.5	13.0	525	1	GUAA_ECOL6
41	57.5	13.0	525	1	GUAA_ECOLI
42	57.5	13.0	525	1	GUAA_SALTI
43	57.5	13.0	525	1	GUAA_SALTY
44	57.5	13.0	525	1	GUAA_YERPE
45	57.5	13.0	835	1	VP3_FOTS1
46	57.5	13.0	855	1	ST14_MOUSE
47	57	12.8	201	1	YOR5_LELV
48	57	12.8	422	1	Y140_HUMAN
49	57	12.8	907	1	I4G2_RABIT
50	57	12.8	1836	1	CIN4_HUMAN
51	57	12.8	1905	1	Y659_PASMU
52	57	12.8	2030	1	DOC3_HUMAN
53	56.5	12.7	229	1	Y4MB_RHISN
54	56.5	12.7	343	1	TDH_VIBVU
55	56.5	12.7	349	1	ADH1_EMENI
56	56.5	12.7	349	1	RECA_VIBVU
57	56.5	12.7	404	1	I18C_HUMAN
58	56.5	12.7	428	1	NH44_CAEEL
59	56.5	12.7	529	1	Z450_HUMAN
60	56.5	12.7	618	1	PPCK_TREPA
61	56.5	12.7	622	1	PPCK_RALSO
62	56.5	12.7	873	1	FIMC_BORPE
63	56.5	12.7	877	1	SYA_THIFE
64	56.5	12.7	1092	1	DPD_DROME
65	56	12.6	279	1	ADHR_DROGU
66	56	12.6	371	1	LE3B_ASPNG
67	56	12.6	405	1	YMP0_YEAST
68	56	12.6	460	1	YMP2_CAEEL
69	56	12.6	484	1	UL32_HSV6U
70	56	12.6	572	1	YHM4_YEAST
71	56	12.6	712	1	HPA_CAUCR
72	56	12.6	740	1	ETR1_CUCSA
73	56	12.6	789	1	RIR1_HSVB4
74	56	12.6	867	1	SYA_AQUAE
75	56	12.6	1053	1	SAL4_HUMAN
76	55.5	12.5	250	1	OS35_SOLOO
77	55.5	12.5	251	1	OLPA_TOBAC
78	55.5	12.5	320	1	PYRB_XYLET
79	55.5	12.5	322	1	PYRB_XYLFA
80	55.5	12.5	486	1	PAC2_MOUSE
81	55.5	12.5	505	1	GUAA_PYRAE
82	55.5	12.5	716	1	PEP_DROME
83	55.5	12.5	885	1	SYA_BROME
84	55.5	12.5	1097	1	DPD_YEAST
85	55	12.4	86	1	YFHL_ECOLI
86	55	12.4	152	1	RK34_SPIOL
87	55	12.4	167	1	UBCE_ARATH
88	55	12.4	209	1	PGPI_HUMAN
89	55	12.4	209	1	PGPI_MOUSE
90	55	12.4	373	1	Y760_RICPR
91	55	12.4	391	1	YCY4_YEAST
92	55	12.4	871	1	SYA_AQUYU
93	55	12.4	928	1	DNL1_CANAL
94	54.5	12.3	166	1	UBCD_ARATH
95	54.5	12.3	192	1	Y857_METTH
96	54.5	12.3	496	1	MOQ3_STAEP
97	54.5	12.3	605	1	PPCK_MYCSM
98	54.5	12.3	607	1	PPCK_STRAM
99	54.5	12.3	844	1	YDZ5_SCHPO
100	54	12.2	202	1	YU69_ARCFU

ALIGNMENTS

RESULT 1

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SAMB SALTY          STANDARD;          PRT;          424 AA.
ID P23832;
AC
DT C1-NOV-1991 (Rel. 20, Created)
DT C1-NOV-1991 (Rel. 20, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE SAM6 protein.
GN SAM6.
OS Salmonella typhimurium.
OS Plasmid 60-mDa cryptic.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Salmonella.
OX NCBI_TaxID=602;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LT2;
RX MEDLINE=91123176; PubMed=1991707;
RA Nohmi T., Hakura A., Nakai Y., Watanabe M., Murayama S.Y.,
RA Sofuni T.;
RT "Salmonella typhimurium has two homologous but different umuDC
RT operons: Cloning of a new umuDC-like operon (samAB) present in a
RT 60-megadalton cryptic plasmid of S. typhimurium.";
RL J. Bacteriol. 173:1051-1063(1991).
CC -!- FUNCTION: Involved in UV protection and mutation.
CC -!- SIMILARITY: Belongs to the DNA polymerase type-Y family.
CC -!- SIMILARITY: Contains 1 umuC domain.
CC
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CC
CC EMBL; D90202; BAAL4226.1; -.
DR PIR; B38176; B38176.
DR HAMAP; MF_01113; atypical; 1.
DR InterPro; IPR001126; UMuC_like.
DR Pfam; PF00817; IMS; 1.
DR PROSITE; PS0173; UMuC; 1.
KW Plasmid; SOS mutagenesis; DNA repair.
FT DOMAIN
FT 2 189 UMuC.
SQ SEQUENCE 424 AA; 47727 MW; FF8C47476CC58A2B CRC64;

Query Match 15.4%; Score 68.5; DB 1; Length 424;
Best Local Similarity 27.8%; Pred. No. 1.9;
Matches 20; Conservative 13; Mismatches 36; Indels 3; Gaps 2;

QY 6 LSSELPQVTSYNGRTFLGLDKCNACIGTSICKFFKEIRSDNMLASHLGLPPDSLIS 65
DB 88 LSELAPRVE-QVSDIMFELDIRGDCIDFEDRGRLRHVRSGTGLTGCGGPKTKLA 146
QY 66 YPANYSDSKIN 77
DB 147 KSAQWA--SKEW 156

RESULT 2
YJIM_ECCLI          STANDARD;          PRT;          383 AA.
ID YJIM_ECCLI
AC P39384;
DT 01-FEB-1995 (Rel. 31, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Hypothetical protein yjim.
GN YJIM OR B4335.
OS Escherichia coli.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Escherichia.
OX NCBI_TaxID=562;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=X12 / MG1655;
RX MEDLINE=95334362; PubMed=7610040;
RA Burland V.D., Plunkett G. III, Sofia H.J., Daniels D.L.,
RA Blattner F.R.;
RT "Analysis of the Escherichia coli genome VI: DNA sequence of the
RT region from 92.8 through 100 minutes.";
RL Nucleic Acids Res. 23:2105-2119(1995).
CC -!- SIMILARITY: STRONG, TO M.JANNASCHII MJ00007.
CC
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CC
CC EMBL; U14003; AAA97231.1; ALT_INIT.
DR EMBL; AE000504; AAC77291.1; ALT_INIT.
DR EcoGene; EGI2574; YJIM.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 383 AA; 42742 MW; 701CBE69D0BFDACC CRC64;

Query Match 15.2%; Score 67.5; DB 1; Length 383;
Best Local Similarity 24.4%; Pred. No. 2.2;
Matches 20; Conservative 18; Mismatches 19; Indels 25; Gaps 6;

QY 8 SLVPOVTSYNGRTFLGLDKC-----NACIGTSIC--KFFKEIRSDNMLASHLGL 58
DB 76 NCLPLKRSYSGFKT-----DKCPYFESDLVVGTTCDKKNWYE-----YMAE---F 121
QY 59 PFDLSLSYPANYSDDSK--IWR 78
DB 122 KPVHWQLNSVKDDASRALWK 143

RESULT 3
ADHR_DROGU          STANDARD;          PRT;          279 AA.
ID ADHR_DROGU
AC Q09007;
DT C1-OCT-1994 (Rel. 30, Created)
DT C1-OCT-1994 (Rel. 30, Last sequence update)
DT 01-OCT-1996 (Rel. 34, Last annotation update)
DE Alcohol dehydrogenase related 31 kDa protein.
GN ADHR OR ADH-DUP.
OS Drosophila guanche (Fruit fly).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
OC Ephydroidea; Drosophilidae; Drosophila.
OX NCBI_TaxID=7266;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=94362951; PubMed=8081544;
RA Marfany G., Gonzalez-Duarte R.;
RT "Characterization and evolution of the Adh genomic region in
RT Drosophila guanche and Drosophila madeirensis.";
RL Mol. Phylogenet. Evol. 2:13-22(1993).
CC -!- SIMILARITY: Belongs to the short-chain dehydrogenases/reductases
CC (SDR) family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; X60113; CAA42712.1; -.
DR PIR; B40731; B40731.
DR HSSP; P10807; IB16.
DR FlyBase; FBgn0012325; Dgna\Adhr.
DR InterPro; IPR002198; ADH_short.

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DR Pfam; PF00106; adh_short; 1.
DR PRINTS; ER00080; SDRFAMILY.
DR PROSITE; PS00061; ADH_SHORT; 1.
KW Oxidoreductase.
FT NP BIND 11 34 NAD OR NADP (BY SIMILARITY).
FT ACT_SITE 152 152 BY SIMILARITY.
SQ SEQUENCE 279 AA; 30988 MW; 650EADC31F4A40 CRC64;

Query Match 15.1%; Score 67; DB 1; Length 279;
Best Local Similarity 29.6%; Pred. No. 1.8;
Matches 21; Conservative 10; Mismatches 26; Indels 14; Gaps 3;

QY 19 PGRFLGLDKNCAGISICKKFKKEI-RSDN---WLASHLGLP-----PSLL 64
D5 201 YGQTFADRLRCAPQOSTASCQNIWTAERSENGQIWADKGGLEWVTLHWYHWMADQFL 260
QY 65 SYPNYSDDSK 75
D5 261 SYMQSTDDNQ 272

RESULT 4
IMPB SALTY
ID _IMPB SALTY STANDARD; PRT; 424 AA.
AC P18642;
DT 01-NOV-1990 (Rel. 16, Created)
DT 01-NOV-1990 (Rel. 16, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE IMPB protein.
GN IMPB
OS Salmonella typhimurium.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Salmonella.
OC NCBI_TaxID=602;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=90384799; PubMed=2129552;
RA Lodwick D., Owen D., Strike P.;
RT "DNA sequence analysis of the imp UV protection and mutation operon
of the plasmid TP10; identification of a third gene.";
RL Nucleic Acids Res. 18:5045-5050(1990).
CC -!- FUNCTION: Involved in UV protection and mutation.
CC -!- SIMILARITY: Belongs to the DNA polymerase type-X family.
CC -!- SIMILARITY: Contains 1 umuC domain.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC -----
DR EMBL; X53528; CAA37608.1; -
DR PIR; JQ0661; JQ0661.
DR HAMAP; MF_01113; atypical; 1.
DR InterPro; IPR001126; UMUc_like.
DR Pfam; PF00817; IMS; 1.
DR PROSITE; PS01173; UMUc; 1.
KW Plasmid; SOS mutagenesis; DNA repair.
FT DOMAIN 2 189 UMUc
SQ SEQUENCE 424 AA; 47786 MW; 68C478C43DA976F8 CRC64;

Query Match 15.0%; Score 66.5; DB 1; Length 424;
Best Local Similarity 27.8%; Pred. No. 3.3;
Matches 20; Conservative 12; Mismatches 37; Indels 3; Gaps 2;

QY 6 LSSLPQVRTSYNFGRTFLGLDKNCAGISICKKFKKEIRSDNWLASHLGLPDDSLIS 65
D5 88 LESLSPAVE-PYSIDEMFDLRGINHCISPEFFGHQLEQVKSWTGLTWGVGIAPTKTLA 146
QY 66 YPNYSDDSKIW 77

Db 147 KSAQWA--TKQW 156
:::|
RESULT 5
DVL2 XENLA
ID _DVL2 XENLA STANDARD; PRT; 736 AA.
AC P51142;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Segment polarity protein dishevelled homolog DVL-2 (Dishevelled-2)
(DSH homolog 2) (Xdsh).
OS Xenopus laevis (African clawed frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;
OC Xenopodinae; Xenopus.
OC NCBI_TaxID=83355;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Oocyte;
RX MEDLINE=95324391; PubMed=7600981;
RA Sokol S.Y., Klingensmith J., Perrimon N., Itoh K.;
RT "Dorsalizing and neuralizing properties of Xdsh, a maternally
expressed Xenopus homolog of dishevelled.";
RL Development 121:1637-1647(1995).
RN [2]
RP ERRATUM.
RX MEDLINE=96017659; PubMed=7588081;
RA Sokol S.Y., Klingensmith J., Perrimon N., Itoh K.;
RL Development 121:3487-3487(1995).
CC -!- FUNCTION: May play a role in the signal transduction pathway
mediated by multiple Wnt genes. Plays a role in dorsal axis
formation and in neural induction.
CC -!- SUBCELLULAR LOCATION: Cytoplasmic (Potential).
CC -!- TISSUE SPECIFICITY: Ubiquitous protein found equally distributed
in both animal-vegetal and dorsal-ventral directions.
CC -!- DEVELOPMENTAL STAGE: Maternal gene detected in different
developmental stages being most abundant in eggs.
CC -!- SIMILARITY: Belongs to the DSH family.
CC -!- SIMILARITY: Contains 1 DEP domain.
CC -!- SIMILARITY: Contains 1 PDZ/DHR domain.
CC -!- SIMILARITY: Contains 1 DIX domain.
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CC -----
DR EMBL; U31552; AAB00688.1; -
DR PIR; I51691; I51691.
DR HSP; Q12923; 3PDZ.
DR InterPro; IPR000591; DEP.
DR InterPro; IPR008319; Dishevell.
DR InterPro; IPR003351; Dishevelled.
DR InterPro; IPR008341; Dishevelled_2.
DR InterPro; IPR001158; DIX.
DR InterPro; IPR001478; PDZ.
DR Pfam; PF03610; DEP; 1.
DR Pfam; PF02377; Dishevelled; 1.
DR Pfam; PF03778; DIX; 1.
DR Pfam; PF03595; PDZ; 1.
DR PRINTS; PR01760; DISHEVELLED.
DR PRINTS; PR01762; DISHEVELLED2.
DR ProDom; PD003639; DIX; 1.
DR SMART; SM00021; DAX; 1.
DR SMART; SM00049; DEP; 1.
DR SMART; SM00228; PDZ; 1.
DR PROSITE; PS50186; DEP; 1.
DR PROSITE; PS50841; DIX; 1.
```

DE PROSITE; P50106; PDZ; 1.
 KW Wnt signaling pathway; Developmental protein.
 FT DOMAIN 1 82 DIX.
 FT DOMAIN 99 113 POLY-PRO.
 FT DOMAIN 222 227 POLY-ARG.
 FT DOMAIN 254 326 PDZ.
 FT DOMAIN 428 502 DEP.
 FT DOMAIN 680 687 POLY-PRO.
 SQ SEQUENCE 736 AA; 79787 MW; AF6C9A1562DD7CEB CRC64;

Query Match 14.9%; Score 66; DB 1; Length 736;
 Best Local Similarity 33.3%; Pred. No. 7.1;
 Matches 23; Conservative 2; Mismatches 22; Gaps 2;
 Indels 22; Gaps 2;

QY 22 TF-GLDCKNACIGTSICKKFF-----XEEIRSDN-----WLASHLGLP 59
 DB 26 TDRLRDFKAALGRGHAKYFFKAMDQFGVYXEEISDDNAKLPCEFNDRVVWSLASSEGSQ 85
 QY 60 PDSLLSYPA 68
 DB 86 PDSAPPAPA 94

RESULT 6
 DPOD SCHPO STANDARD; PRT; 1086 AA.
 AC P30316; Q13016; Q9USU0; Q9UU61;
 DT 01-APR-1993 (Rel. 25, Created)
 DT 16-OCT-2001 (Rel. 40, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE DNA polymerase delta catalytic subunit (EC 2.7.7.7) (DNA polymerase III).
 DS POL3 OR POLD OR SPBC336.04.
 GN Schizosaccharomyces pombe (Fission yeast).
 OS Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
 OC Schizosaccharomycetales; Schizosaccharomycetaceae;
 OC Schizosaccharomycetes.
 OX NCBI_TaxID=4896;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92071954; PubMed=1960723;
 RA Pignede G., Bouvier D., de Recondo A.M., Baldacci G.;
 RT "Characterization of the POL3 gene product from Schizosaccharomycetes pombe indicates inter-species conservation of the catalytic subunit of DNA polymerase delta.";
 RL J. Mol. Biol. 222:209-218(1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=93184400; PubMed=8443413;
 RA Park H., Francesconi S., Wang T.S.F.;
 RT "Cell cycle expression of two replicative DNA polymerases alpha and delta from Schizosaccharomycetes pombe.";
 RL Mol. Biol. Cell 4:145-157(1993).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX STRAIN=972;
 RC MEDLINE=21849401; PubMed=11859360;
 RA Wood V., Gwilliam R., Rajadream M.A., Lyne M., Lyne R., Stewart A.,
 RA Sgouros J., Peat N., Hayles J., Baker S., Bastam D., Bowman S.,
 RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
 RA Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
 RA Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
 RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
 RA James K., Jones L., Jones M., Leather S., McDonald S., McLean J.,
 RA Mooney P., Moule S., Murgall K., Murphy L., Niblett D., Odell C.,
 RA Oliver K., O'Neill S., Pearson D., Quail M.A., Rabinowitsch E.,
 RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
 RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
 RA Taylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S.,
 RA Woodward J., Volckaert G., Aert R., Robben J., Grymprez B.,
 RA Weltjens I., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
 RA Gabel C., Fuchs M., Fritzc C., Holzer E., Moestl D., Hilbert H.,
 RA Borzym K., Janger I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,

RA Eger P., Zimmermann W., Wedler H., Wambutt R., Purnelle B.,
 RA Goffeau A., Cadieu E., Dreano S., Gloux S., Ielaure V., Mottier S.,
 RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
 RA Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Rhode G.,
 RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
 RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,
 RA Carrutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
 RA Szpakowski G.V., Uesery D., Barrell B.G., Nurse P.;
 RT "The genome sequence of Schizosaccharomycetes pombe.";
 RL Nature 415:871-880(2002).
 RN [4]
 RP SEQUENCE OF 272-455 FROM N.A.
 RC STRAIN=968 h90;
 RX MEDLINE=20223869; PubMed=10759889;
 RA Ding D.-Q., Tomita Y., Yamamoto A., Chikashige Y., Haraguchi T.,
 RA Hiraoaka Y.;
 RT "Large-scale screening of intracellular protein localization in living fission yeast cells by the use of a GFP-fusion genomic DNA library.";
 RL Genes Cells 5:169-190(2000).
 CC -!- FUNCTION: This polymerase possesses two enzymatic activities: DNA synthesis (polymerase) and an exonucleolytic activity that degrades single stranded DNA in the 3' to 5' direction.
 CC -!- CATALYTIC ACTIVITY: N deoxynucleoside triphosphate = N diphosphate + [DNA] (N).
 CC -!- SUBUNIT: HETEROTETRAMER THAT CONSIST OF THE POL3, CDC1, CDC27 AND CDM1 SUBUNITS. THE POL3 SUBUNIT CONTAINS THE POLYMERASE ACTIVE SITE AND MOST LIKELY THE ACTIVE SITE FOR THE 3'-5' EXONUCLEASE ACTIVITY.
 CC -!- SUBCELLULAR LOCATION: Nucleus.
 CC -!- MISCELLANEOUS: In eukaryotes there are five DNA polymerases: alpha, beta, gamma, delta, and epsilon which are responsible for different reactions of DNA synthesis.
 CC -!- SIMILARITY: Belongs to the DNA polymerase type-B family.
 CC
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 CC
 CC EMBL; X59278; CAA41968.1; --
 CC EMBL; L07734; AAA35303.1; --
 CC EMBL; AL121815; CAA58156.1; --
 CC EMBL; AB027796; BAA87100.1; --
 CC PIR; S19661; S19661.
 CC PIR; T40242; T40242.
 CC PIR; T43266; T43266.
 CC GeneDB SPombe; SPBC336.04; --
 CC GO; GO:0005717; C:chromatin; ISS.
 CC GO; GO:0005694; C:chromosome; ISS.
 CC GO; GO:0005657; C:replication fork; ISS.
 CC GO; GO:0007049; P:cell cycle; ISS.
 CC GO; GO:0006260; P:DNA replication; ISS.
 CC GO; GO:0007067; P:mitosis; ISS.
 CC InterPro; IPR006172; DNA pol B.
 CC InterPro; IPR006134; DNA pol B dom.
 CC InterPro; IPR006133; DNA pol B exo.
 CC Pfam; PF00136; DNA pol B; 1.
 CC Pfam; PF03104; DNA pol B exo; 1.
 CC PRINTS; PR00106; DNAPOLE.
 CC SMART; SM00486; POLB; 1.
 CC TIGRFS; TIGR00592; Pol2; 1.
 CC PROSITE; PS00116; DNA POLYMERASE B; 1.
 CC TRANSFAS; DNA-directed DNA polymerase; DNA replication;
 CC DNA-binding; Hydroxylase; Exonuclease; Zinc-finger; Nuclear protein.
 KW ZN_FING 93 1011 C4-TYPE (POTENTIAL).
 FT ZN_FING 1040 1058 Q -> E (IN REF. 1).
 FT CONFLICT 102 102 K -> Q (IN REF. 4).
 FT CONFLICT 290 290 T -> S (IN REF. 1).
 FT CONFLICT 419 419

FT CONFLICT 545 545 R -> C (IN REF. 1 AND 2).
FT CONFLICT 777 784 KLEFEKVV -> NWSFST (IN REF. 1).
FT CONFLICT 866 866 L -> H (IN REF. 1).
SQ SEQUENCE 1086 AA; 123568 MW; 99F528413220C3CA CRC64;
Query Match 14.8%; Score 65.5; DB 1; Length 1086;
Best Local Similarity 27.7%; Pred. No. 13;
Matches 18; Conservative 13; Mismatches 33; Indels 1; Gaps 1;
QY 2 PASLSLSVQVRSYNGFTGLGDKNACIGTSICKKFKBEIRSDNWLASHLGLPPD 61
DE 317 PVTQIASIV-QYGDSTFEVRNFCVDTCSQIVGIVQVFEFQNHMLS-SWSKFRVDVDPD 375
QY 62 SLISY 66
DE 376 VLICV 380
RESULT 7
YD16 SCHPO STANDARD; PRT; 385 AA.
AC Q92344;
DT C1-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Hypothetical protein C1P8.06 in chromosome I.
GN SPAC1F8.06.
OS Schizosaccharomyces pombe (Fission yeast).
OC Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
OC Schizosaccharomycetales; Schizosaccharomycetaceae;
OC Schizosaccharomycetes.
OX NCBI_TaxID=4896;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=972;
RX MEDLINE=21848401; PubMed=11859369;
RA Wood V., Williams R., Rajandream M.A., Lyne M., Lyne R., Stewart A.,
RA Sgourou J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
RA Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA James K., Jones L., Jones M., Leather S., McDonald S., McLean J.,
RA McInerney P., Moule S., Mungall K., Murphy L., Niblett D., Odeil C.,
RA Oliver K., O'Neill S., Pearson D., Quail M.A., Rabinowitsch E.,
RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Taylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S.,
RA Woodward J., Volkart G., Aert R., Robben J., Grymoprez B.,
RA Weltjens I., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
RA Gabel C., Fuchs M., Fritz C., Holzer E., Moestl D., Hilbert H.,
RA Borzym K., Langer I., Beck A., Leirach H., Reinhardt R., Pohl T.M.,
RA Eger P., Zimmermann W., Wedler H., Wambutt R., Purnelle B.,
RA Goffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Lucas M., Rochet M., Gallard C., Tallada V.A., Garzon A., Thode G.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,
RA Cerutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
RA Shpakovski G.V., Ussery D., Barrell B.G., Nurse P.,
RT "The genome sequence of Schizosaccharomyces pombe."
RL Nature 415:871-880(2002).
CC -!- SIMILARITY: TO THE C-TERMINAL OF S.POMBE SPAC8A4.02C.
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CC EMBL; 281312; CAB03600.1; -.
DR
FT

DR PIR; T38113; T38113.
DR GeneDB Spombe; SPAC1F8.06; -.
KW Hypothetical protein.
FT DOMAIN 20 136 SER-RICH.
SQ SEQUENCE 385 AA; 41000 MW; 89A58F377701F5C4 CRC64;
Query Match 14.4%; Score 64; DB 1; Length 385;
Best Local Similarity 29.3%; Pred. No. 5.8;
Matches 24; Conservative 14; Mismatches 34; Indels 10; Gaps 4;
QY 3 ASSLSLSVPO--VRSYN--FGRFTFLGDKNACIGTSICKKFKBEIRSDNWLASHLGL 58
DE 127 SSSLSSTVSSTPVSFTVSGTFTVSSSTTYQVTPIC-----DGVRELEYAVNVDL 181
QY 59 PPSDLSLYPAN-YSDDSKIMRP 79
DE 182 PSESTFCHPSNGYETVSTFNKP 203
RESULT 8
C122 HUMAN STANDARD; PRT; 889 AA.
ID AC Q9BZQ6; Q9HCW1;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Putative alpha-mannosidase Clorf22 (EC 3.2.1.-).
GN C1ORF22.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21218927; PubMed=11318611;
RA Sood R., Bonner T.I., Makalowska I., Stephan D.A., Robbins C.M.,
RA Connors T.D., Morgenbesser S.D., Su K., Faruque M.U., Pinkett H.,
RA Graham C., Baxevanis A.D., Klinger K.W., Landes G.M., Trent J.M.,
RA Carpten J.D.;
RT "Cloning and characterization of 13 novel transcripts and the human
RT RGS8 gene from the 1q25 region encompassing the hereditary prostate
RT cancer (HPC1) locus."
RL Genomics 73:211-222(2001).
RN [2]
RP SEQUENCE OF 16-469 FROM N.A.
RA Cobley V.;
RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: Belongs to family 47 of glycosyl hydrolases.
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CC or send an email to license@isb-sib.ch).
CC EMBL; AF288393; AAG60613.1; -.
DR EMBL; AL096819; CAC03447.1; -.
DR HSSP; P32906; 1DL2.
DR Genew; HGNC:16787; Clorf22.
DR InterPro; IPR000886; ER target S.
DR InterPro; IPR001382; Glyco_hydro_47.
DR InterPro; IPR003137; PA.
DR Pfam; PF01532; Glyco_hydro_47; 1.
DR Pfam; PF02225; PA; 1.
DR PRINTS; PR00747; GLYHDLASE47.
DR PRODOM; PD003239; Glyco_hydro_47; 1.
DR PROSITE; PS00014; ER_TARGET; 1.
KW Hypothetical protein; Hydrolase; Glycosidase; Glycoprotein;
KW Endoplasmic reticulum.
FT SITE 886 889
FT CARBOHYD 75 75
FT PREVENT SECRETION FROM ER (POTENTIAL).
FT N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 152 152 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 461 461 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 468 468 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 767 767 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 771 771 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 857 857 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 889 AA; 100304 MW; 21354A62C5901666 CRC64;

Query Match 14.4%; Score 64; DB 1; Length 889;
Best Local Similarity 39.5%; Pred. No. 15;
Matches 17; Conservative 4; Mismatches 16; Indels 6; Gaps 1;

Qy 1 LPASSLSLPQVTSYNFQ-----RFLGLDKNCACIGTSI 37
||| : : : : :
148 LPAFNTTSGLPYRINKLFGIRKPEARTGTETDTCTACAGTLI 190

RESULT 9

MA6R_YEAST STANDARD; PRT; 473 AA.
AC P10508;
DT 01-JUL-1989 (Rel. 11, Created)
DT 01-JUL-1989 (Rel. 11, Last sequence update)
DT 01-OCT-1994 (Rel. 30, Last annotation update)
DE Maltose fermentation regulatory protein MAL6R.
GN MAL6R OR MAL63.
OS Saccharomyces cerevisiae (Baker's yeast).
OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
OX NCBI_TaxID=4932;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Carlsbergensis / JMW1901;
RX MEDLINE=89127146; PubMed=2851710;
RA Sollitti P., Marmur J.;
RT "Primary structure of the regulatory gene from the MAL6 locus of
Saccharomyces carlsbergensis";
RL Mol. Gen. Genet. 213:56-62(1988).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=89106267; PubMed=3145816;
RA Kim J., Michels C.A.;
RT "The MAL63 gene of Saccharomyces encodes a cysteine-zinc finger
protein.";
RL Curr. Genet. 14:319-323(1988).
CC -!- FUNCTION: REGULATES THE COORDINATE TRANSCRIPTION OF STRUCTURAL
MAL6S (MALTASE) AND MAL6T (MALTASE PERMEASE) GENES.
CC -!- SUBCELLULAR LOCATION: Nuclear.
CC -!- SIMILARITY: Contains 1 Zn(2)-Cys(6); fungal-type binuclear cluster
domain.

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EMBL; X12576; CAA31088.1; -;
DR EMBL; M36537; AAA34755.1; -;
DR PIR; S03814; RGYM3;
DR TRANSFAC; T00480;
DR SGD; L0001023; MAL63.
DR InterPro; IPR007219; Fungal trans.
DR InterPro; IPR001138; Fungi Trn.
DR Pfam; PF04082; Fungal trans; 1.
DR Pfam; PF00172; Zn clus; 1.
DR PRINTS; PR00054; FUNGALZNCYS.
DR SMART; SM00066; GAL4; 1.
DR PROSITE; PS00463; ZN2_CY6_FUNGAL_1; 1.
DR PROSITE; PS00048; ZN2_CY6_FUNGAL_2; 1.
KW Transcription regulation; Activator; DNA-binding; Nuclear protein;

KW Zinc; Metal-binding; Maltose metabolism; Multigene family.
FT DNA BIND 8 34 ZN(2)-CYS(6); FUNGAL-TYPE.
FT DOMAIN 41 49 NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
FT CONFLICT 90 91 MISSING (IN REF. 2).
FT CONFLICT 206 206 MISSING (IN REF. 2).
SQ SEQUENCE 473 AA; 54895 MW; 679111C8871B643D CRC64;

Query Match 14.3%; Score 63.5; DB 1; Length 473;
Best Local Similarity 34.7%; Pred. No. 8.4;
Matches 17; Conservative 8; Mismatches 19; Indels 5; Gaps 2;

Qy 1 LPASSLSLPQVTSYNFQETFLGLDKNCACIGTSICKKFKKEIRSD 49
| : : : : :
128 LSAATLSDL--QIEIEYEGVTFTEQLCTLCM---LSRQFFDLSNSD 171

RESULT 10

YS81_CAEEL STANDARD; PRT; 473 AA.
ID YS81_CAEEL
AC Q09621;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 01-NOV-1995 (Rel. 32, Last annotation update)
DE Hypothetical 52.5 kDa protein ZK945.1 in chromosome II.
GN ZK945.1.
OS Caenorhabditis elegans.
OC Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
OC Rhabditidae; Pelodierinae; Caenorhabditis.
OX NCBI_TaxID=6239;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Bristol N2;
RA Wilkinson-Spratt J.;
RL Submitted (FEB-1995) to the EMBL/GenBank/DBJ databases.

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EMBL; Z48544; CAA88435.1; -;
DR PIR; T28118; T28118.
DR MEROPS; S12.UNW; -;
DR WormPep; ZK945.1; CH01731.
DR InterPro; IPR001466; Beta lactamase.
DR Pfam; PF00144; beta-lactamase; 1.
KW Hypothetical protein; Transmembrane.
FT TRANSMEM 26 48 POTENTIAL.
FT TRANSMEM 125 143 POTENTIAL.
SQ SEQUENCE 473 AA; 52546 MW; 168F91040768AF54 CRC64;

Query Match 14.3%; Score 63.5; DB 1; Length 473;
Best Local Similarity 41.2%; Pred. No. 8.4;
Matches 14; Conservative 6; Mismatches 9; Indels 5; Gaps 1;

Qy 40 KPFKEIRSDNMLASHLGLPPD-----SLLSYPA 68
: : : : :
243 RFFKEVADVHGIDFHLGLPPSEHVTSLRSMPS 276

RESULT 11

CDP2_MAIZE STANDARD; PRT; 513 AA.
ID CDP2_MAIZE
AC P49101;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Calcium-dependent protein kinase 2 (EC 2.7.1.1-) (CDPK 2).
GN CDPK2.
OS Zea mays (Maize).

```
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC PACCAD clade; Panicoideae; Andropogoneae; Zea.
OX NCBI_TaxID=4577;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=cv. Merit; TISSUE=Root tip;
RX MEDLINE=95281563; PubMed=7761420;
RA Patil S., Takezawa D., Pooviah B.W.;
RT "Chimeric plant calcium/calmodulin-dependent protein kinase gene with
RT a neural visinin-like calcium-binding domain.";
RL Proc. Natl. Acad. Sci. U.S.A. 92:4897-4901 (1995).
CC -!- FUNCTION: May play a role in signal transduction pathways that
CC involve calcium as a second messenger.
CC -!- ENZYME REGULATION: Activated by calcium (By similarity).
CC Autophosphorylation may play an important role in the regulation
CC of the kinase activity (By similarity).
CC -!- SIMILARITY: Belongs to the Ser/Thr family of protein kinases. CaMK
CC subfamily.
CC -!- SIMILARITY: Contains 4 EF-hand calcium-binding domains.
CC
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CC
CC EMBL; U28376; AAA69507.1; --
CC PIR; T02259; T02259.
CC DR HSSP; O63450; 1A06.
CC DR MaizeDB; 56895; -.
CC DR InterPro; IPR002048; EF-hand.
CC DR InterPro; IPR000719; Prot_kinase.
CC DR InterPro; IPR008271; Ser_thr_pkin_AS.
CC DR InterPro; IPR002290; Ser_thr_pkinase.
CC DR Pfam; PF00036; ehand; 4.
CC DR Pfam; PF00069; pkinase; 1.
CC DR ProDom; PD000012; EF-hand; 2.
CC DR ProDom; PD000001; Prot_kinase; 1.
CC DR SMART; SM00054; EFh; 4.
CC DR SMART; SM00220; S_TKc; 1.
CC DR PROSITE; PS00018; EF_HAND; 4.
CC DR PROSITE; PS00107; PROTEIN_KINASE_ATP; 1.
CC DR PROSITE; PS00108; PROTEIN_KINASE_ST; 1.
CC DR PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
CC DR Transferase; Serine/threonine-protein kinase; ATP-binding;
CC Calcium-binding; Phosphorylation.
FT DOMAIN 65 323 PROTEIN_KINASE.
FT NP_BIND 71 79 ATP (By similarity).
FT BINDING 94 94 ATP (By similarity).
FT ACT_SITE 189 189 BY SIMILARITY.
FT CA_BIND 379 390 EF-HAND 1 (POTENTIAL).
FT CA_BIND 415 426 EF-HAND 2 (POTENTIAL).
FT CA_BIND 451 462 EF-HAND 3 (POTENTIAL).
FT CA_BIND 486 497 EF-HAND 4 (POTENTIAL).
SQ SEQUENCE 513 AA; 58081 MW; 235A61630C0AC336 CRC64;

Query Match 14.2%; Score 63; DB 1; Length 513;
Best Local Similarity 20.7%; Pred. No. 11;
Matches 24; Conservative 21; Mismatches 35; Indels 36; Gaps 4;

OY 2 PASSLSLSPV-----QVTSYNFGR-----TFLGLD----- 27
DB 31 PSATNSSAVPVAVPPKPTADTILKQYEDVRSVSGKELGRGQGVYLTCTEASGRQ 90
OY 28 -KNCACIGTSCIKPFKEIRSDNWLASHGLPPDLSLSPYANYSDDSKIWPRVEI 82
DB 91 YACKSISKRLKSVKADREDIRREIQIMQHLSGQ-NIVEFRGAYEDKSNVHVWML 145

RESULT 12
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YA36_MYCPN
ID YA36_MYCPN STANDARD; PRT; 673 AA.
AC P75078;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Hypothetical protein MF0036 [B01_orf673].
GN MF0036 OR MP118.
OS Mycoplasma pneumoniae.
OC Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.
CX NCBI_TaxID=2104;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC 29342 / M129;
RX MEDLINE=97105885; PubMed=8948633;
RA Himmelreich R., Hilbert H., Plagens H., Pirkl E., Li B.-C.,
RA Herrmann R.;
RT "Complete sequence analysis of the genome of the bacterium Mycoplasma
RT pneumoniae.";
RL Nucleic Acids Res. 24:4420-4449 (1996).
CC -!- SIMILARITY: BELONGS TO THE MG032 / MG096 / MG288 FAMILY.
CC
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CC
CC EMBL; AE000014; AAB95766.1; --
CC PIR; S73444; S73444.
CC DR InterPro; IPR004306; MG032/096/288_1.
CC DR InterPro; IPR004319; MG032/096/288_2.
CC DR Pfam; PF03072; DUF237; 1.
CC DR Pfam; PF03086; DUF240; 1.
CC DR ProDom; PD004834; MG032/096/288_2; 1.
CC DR Hypothetical protein; Complete proteome.
KW SEQUENCE 673 AA; 76629 MW; 9C004DFDC3C15F8E CRC64;

Query Match 14.2%; Score 63; DB 1; Length 673;
Best Local Similarity 32.6%; Pred. No. 14;
Matches 15; Conservative 6; Mismatches 17; Indels 8; Gaps 1;

OY 46 IRSDNWL-----SHLGLPDSLSLSPYANYSDDSKIWPRVEIF 83
DB 482 IRMSNWLKRWALGYANTHVGSQNVKATIDGNPSDTTKVLIAPEDF 527

RESULT 13
GPV_RAT
ID GPV_RAT STANDARD; PRT; 567 AA.
AC O08770;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Platelet glycoprotein v precursor (GPV) (CD42D).
GN GP5.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Wistar; TISSUE=Liver;
RX MEDLINE=97275136; PubMed=9129030;
RA Ravanat C., Morales M., Azorsa D.O., Moog S., Schuhler S.;
RA Grunert P., Loew D., van Dorsselaer A., Cazenave J.-P., Lanza F.;
RT "Gene cloning of rat and mouse platelet glycoprotein V:
RT identification of megakaryocyte-specific promoters and demonstration
RT of functional thrombin cleavage.";
RL Blood 89:3253-3262 (1997).
CC -!- FUNCTION: The GPIb-V-IX complex functions as the von Willebrand
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DR InterPro: IPR001356; Homeobox.
DR Pfam: PF00046; homeobox; 1.
DR PRINTS: PR00024; HOMEBOX.
DR PRODOM: PD000010; Homeobox; 1.
DR SMART: SM00389; HOX; 1.
DR PROSITE: PS00027; HOMEBOX 1; 1.
DR PROSITE: PS00071; HOMEBOX 2; 1.
KW Homeobox; DNA-binding; Developmental protein; Nuclear protein;
KW Transcription regulation.
FT DNA BIND 268 327 HOMEBOX.
FT CONFLICT 118 118 K -> N (IN REF. 1).
FT CONFLICT 265 265 A -> G (IN REF. 3).
FT CONFLICT 271 271 MISSING (IN REF. 3).
SQ SEQUENCE 342 AA; 38072 MW; BD8127FD43C2A37B CRC64;

Query Match 14.0%; Score 62; DB 1; Length 342;
Best Local Similarity 31.3%; Pred No. 8.7;
Matches 26; Conservative 9; Mismatches 46; Indels 2; Gaps 2;

Qy 1 LPASLSLVPQVTSYNGRTFLGLDKNCACIGTSICKFFKEIRSDNWLASHGLPP 60
Db 133 LPESCLGHEVPVSYRASPSYALDKTTPHSGANDFEAPF-EQASINPRAHLESFQ 191

Qy 61 -DSLLSYPNYSDDSKIWRPVEI 82
Db 192 LGGKVSFETPKSDSPSPNEI 214

RESULT 15
QYBO_BACSU STANDARD; PRT; 1585 AA.
ID YQBO_BACSU STANDARD; PRT; 1585 AA.
AC P45931;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Hypothetical protein yqbo.
YQBO OR BSU26030.
GN Bacillus subtilis.
OC Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
OX NCBI_TaxID=1423;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=168 / JH642;
RX MEDLINE=95219086; PubMed=7704261;
RA Takemaru K.-I., Mizuno M., Sato T., Takeuchi M., Kobayashi Y.;
RT "Complete nucleotide sequence of a skin element excised by DNA
rearrangement during sporulation in Bacillus subtilis.";
RL Microbiology 141:323-327(1995).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=168 / JH642;
RX MEDLINE=97124195; PubMed=8969508;
RA Mizuno M., Masuda S., Takemaru K.-I., Hosono S., Sato T., Takeuchi M.,
RA Kobayashi Y.;
RT "Systematic sequencing of the 283 kb 210 degrees-232 degrees region of
the Bacillus subtilis genome containing the skin element and many
sporulation genes.";
RL Microbiology 142:3103-3111(1996).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=168;
RX MEDLINE=98040033; PubMed=9384377;
RA Kunst F., Ogasawara N., Moszer I., Albertini A.M., Alloni G.,
RA Azevedo V., Bertero M.G., Bessieres P., Bolotin A., Borchert S.,
RA Borriss R., Boursier L., Brans A., Braun M., Brignell S.C., Bron S.,
RA Brocillet S., Bruschi C.V., Caldwell B., Capuano V., Carter N.M.,
RA Choi S.-K., Codani J.J., Conerton I.F., Cummings N.J., Daniel R.A.,
RA Denizot F., Devine K.M., Dusterhoft A., Ehrlich S.D., Emmerson P.T.,
RA Entian K.D., Errington J., Fabret C., Ferrari E., Foulger D.,
RA Fritz C., Fujita M., Fujita Y., Fuma S., Galizzi A., Galleron N.,
RA Ghim S.Y., Glaser P., Goffeau A., Gollightly E.J., Grandi G.,
RA Guisepi G., Guy B.J., Haga K., Haiech J., Harwood C.R., Henaut A.,
RA Hilbert H., Holsappel S., Hosono S., Hullo M.F., Itaya M., Jones L.,

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RA Joris B., Karamata D., Kashara Y., Klaerr-Blanchard M., Klein C.,
RA Kobayashi Y., Koetter P., Koningsstein G., Krogh S., Kumano M.,
RA Kurita K., Lapidus A., Lardinois S., Lauber J., Lazarevic V.,
RA Lee S.M., Levine A., Liu H., Masuda S., Mauel C., Medigue C.,
RA Medina N., Mellado R.P., Mizuno M., Moestl D., Nakai S., Noback M.,
RA Noone D., O'Reilly M., Ogawa K., Ogiwara A., Oudega B., Park S.H.,
RA Parro V., Pohl T.M., Portetelie D., Porwollik S., Prescott A.M.,
RA Presecan E., Pujic P., Purnelle B., Rapoport G., Rey M., Reynolds S.,
RA Rieger M., Rivolta C., Rocha E., Roche B., Rose M., Sadate Y.,
RA Sato T., Scanlan E., Schleich S., Schroeter R., Scoffone F.,
RA Sekiguchi J., Sekowska A., Seror S.J., Serro P., Shin B.S., Solido B.,
RA Sorokin A., Tacconi B., Takagi T., Takahashi H., Takemaru K.,
RA Takeuchi M., Tamakoshi A., Tanaka T., Terpstra P., Tognoni A.,
RA Tosato V., Uchiyama S., Vandenbol M., Vannier F., Vassarotti A.,
RA Viari A., Wambutt R., Wedler E., Wedler H., Weitzenecker T.,
RA Winters P., Wipat A., Yamamoto H., Yamane K., Yasumoto K., Yata K.,
RA Yoshida K., Yoshikawa H.F., Zumstein E., Yoshikawa H., Danchin A.;
RT "The complete genome sequence of the Gram-positive bacterium Bacillus
subtilis.";
RL Nature 390:249-256(1997).
RN [4]
RP IDENTIFICATION.
RX MEDLINE=96084975; PubMed=7489895;
RA Medigue C., Moszer I., Viari A., Danchin A.;
RT "Analysis of a Bacillus subtilis genome fragment using a co-operative
computer system prototype.";
RL Gene 165:GC37-GC51(1995).
RC -!- SIMILARITY: STRONG, TO B.SUBTILIS XKDO.
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CC -----
DR EMBL; D32216; BAA06947.1; -
DR EMBL; D84432; BAA12411.1; -
DR EMBL; D99117; CAB14544.1; -
DR PIR; B69948; B69948.
DR Subtilist; BG11286; YQBO.
DR InterPro: IPR008258; SLT_dom.
DR Pfam; PF01464; SLT; 1.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 1585 AA; 171030 MW; 1F82AB7F0250735F CRC64;

Query Match 13.7%; Score 61; DB 1; Length 1585;
Best Local Similarity 26.4%; Pred. No. 67;
Matches 19; Conservative 14; Mismatches 27; Indels 12; Gaps 3;

Qy 3 ASSLSLVPQVTSYNGRTFLGLDKNCACIGTSICKF---FKBEIRS-DNWLASHGL 58
Db 1109 AAVTASVSPIDTS-----SLDEQATSFQQTFSFGQIRDNVSMKQKQVQ 1160

Qy 59 PPDLSLSPYNY 70
Db 1161 PMNLLISYPNY 1172

RESULT 16
GLPG_HAEIN STANDARD; PRT; 192 AA.
ID GLPG_HAEIN STANDARD; PRT; 192 AA.
AC P44783;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Protein glpG homolog.
GN GLPG OR H10618.
OS Haemophilus influenzae.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pasteurellales;
OC Pasteurellaceae; Haemophilus.
OX NCBI_TaxID=727;

```


"The nucleotide sequence of *Saccharomyces cerevisiae* chromosome XIII."

RT Nature 387:90-93(1997).

RL

CC -!- SIMILARITY: Contains 1 UBX domain.

CC

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CC

CC

DR EMBL: Z48952; CAA88792.1; --

DR FIR: S52827; S52827.

DR GermOnline: 142733; --

DR SGD: S0004671; YMR067C.

DR InterPro: IPR001012; UBX.

DR Pfam: PF00789; UBX; 1.

DR SMART: SM00166; UBX; 1.

DR PROSITE: PS50033; UBX; 1.

DR Hypothetical protein.

KW DOMAIN 273 350

FT SEQUENCE 416 AA; 46965 MW; 615E5F8EC1D0DD31 CRC64;

SQ

Query Match 13.5%; Score 60; DB 1; Length 416;

Best Local Similarity 27.5%; Pred. No. 19;

Matches 19; Conservative 10; Mismatches 24; Indels 16; Gaps 3;

QY 10 VPOVRIYSNGRTFLGLDKNCACIGTSI-----CKFKKEIRSDNWLASHLGLP---- 59

Db 1 MPWVTVKYNF-----QLFCKCKSLNSTLNDVLHQSIQFFQLHTSSNDWSLIHLDKPVPED 55

QY 60 -PDSLLSYLP 67

Db 56 LPWRLNLNP 64

RESULT 19

YMX3 CAEEL

ID YMX3 CAEEL STANDARD; PRT; 618 AA.

AC F34511;

DT 01-FEB-1994 (Rel. 28, Created)

DT 16-OCT-2001 (Rel. 40, Last sequence update)

DT 28-FEB-2003 (Rel. 41, Last annotation update)

DE Hypothetical protein K06H7.3 in chromosome III.

GN K06H7.3

GD

GN Caenorhabditis elegans.

OS Caenorhabditis elegans.

OC Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditidae;

OC Rhabditidae; Pelodierinae; Caenorhabditis.

OX NCBI_TaxID=6239;

OX [1]

RE SEQUENCE FROM N.A.

RC STRAIN=Bristol N2.

RF MEDLINE=94150718; PubMed=79063198;

EX

RA Wilson R., Ainscough R., Anderson K., Baynes C., Berks M., Bonfield J., Burton J., Connell M., Copsey T., Cooper J., Coulson A., Craxton M., Dear S., Du Z., Durbin R., Favell A., Fraser A., Fulton L., Gardner A., Green P., Hawkins T., Hillier L., Jier M., Johnston L., Jones M., Kersey J., Kirsten J., Laister N., Latreille P., Lightning J., Lloyd C., Mortimore B., O'Callaghan M., Parsons J., Percy C., Rifken L., Roopra A., Saunders D., Showkeen R., Sims M., Smaldon N., Smith A., Smith M., Sonhammer B., Staden K., Sulston J., Thierry-Mieg J., Thomas K., Vaudin M., Vaughan K., Waterston R., Watson A., Weinstock L., Wilkinson-Sproat J., Wchldman P.;

RA "2.2 Mb of contiguous nucleotide sequence from chromosome III of C. elegans";

RT

RT Nature 368:32-38(1994).

RL

RN [2]

RN REVISIONS.

RA Waterston R.;

RA Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.

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CC or send an email to license@isb-sib.ch).

CC EMBL; AJ007311; CAB65205.1; -;
DR HSP; Q9N1E2; IHOX.
DR HAMAP; MF 00473; -; 1.
DR InterPro; IPR001672; G6P_Isomerase.
DR Pfam; PF00342; 3GI; 1.
DR PRINTS; PR00662; G6PISOMERASE
DR PROSITE; PS00765; P_GLUCOSE_ISOMERASE_1; 1.
DR PROSITE; PS00174; P_GLUCOSE_ISOMERASE_2; 1.
KW Isomerase; Glucoseogenesis; Glycolysis.
FT ACT_SITE 381 391 BY SIMILARITY.
FT ACT_SITE 485 485 BY SIMILARITY.
SQ SEQUENCE 497 AA; 56091 MW; 8CDA94027718310C CRC64;

Query Match 13.4%; Score 59.5; DB 1; Length 497;
Best Local Similarity 35.4%; Pred. No. 26;
Matches 17; Conservative 5; Mismatches 25; Indels 1; Gaps 1;

QY 25 GLDKNCACIGTSICKKFKKEIRSDNWLASHLGLPPDLSLYRANYS 72

Db 115 GLDMSAVINTREKIKVISNOIREKKWL-GHSGLPITDINVGIGGSD 161

RESULT 23

ZBT1 HUMAN
ID ZBT1 HUMAN STANDARD; PRT; 713 AA.
AC Q9Y2KL;
DT 10-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Zinc finger and BTB domain containing protein 1.
GN ZBT1 OR KIAA0997.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
CX NCBI_TaxID=9606;
[1]
SEQUENCE FROM N.A.
RP TISSUE=Eye;
RC MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marjina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield V.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
FT "Generation and initial analysis of more than 15,000 full-length
FT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
[2]

RP SEQUENCE OF 1-644 FROM N.A.
RC TISSUE=Brain;

RX MEDLINE=99246063; PubMed=10231032;
RA Nagase T., Ishikawa K.-I., Suyama M., Kikuno R., Hiroseawa M.,
RA Miyajima N., Tanaka A., Kotani H., Nomura N., Ohara O.;

RT "Prediction of the coding sequences of unidentified human genes. XIII.
RT The complete sequences of 100 new cDNA clones from brain which code
RT for large proteins in vitro.";
RL DNA Res. 6:63-70 (1999).

CC -!- FUNCTION: May be involved in transcriptional regulation.
CC -!- SUBCELLULAR LOCATION: Nuclear (Potential).
CC -!- SIMILARITY: Contains 1 BTB/POZ domain.
CC -!- SIMILARITY: Contains 8 C2H2-type zinc fingers.

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CC EMBL; BC050719; AAHS0719.1; -;
CC EMBL; AB023214; BAA76841.1; -;
CC Genew; HGNC:20259; ZBT1.

CC InterPro; IPR000210; BTB_POZ.
CC InterPro; IPR007087; Znf_C2H2.

CC Pfam; PF00651; BTB; 1.
CC Pfam; PF00096; zf-C2H2; 5.

CC SMART; SM00225; BTB; 1.
CC SMART; SM00355; Znf_C2H2; 8.

CC PROSITE; PS00097; BTB; 1.
CC PROSITE; PS00028; ZINC_FINGER_C2H2_1; 4.

CC PROSITE; PS00157; ZINC_FINGER_C2H2_2; 3.
CC Transcription regulation; DNA-binding; Zinc-finger; Metal-binding;

KW Nuclear protein; Repeat.
FT DOMAIN 24 91 BTB.

FT ZN_FING 216 238 C2H2-TYPE 1 (ATYPICAL).
FT ZN_FING 448 470 C2H2-TYPE 2 (ATYPICAL).

FT ZN_FING 534 556 C2H2-TYPE 3 (ATYPICAL).
FT ZN_FING 578 600 C2H2-TYPE 4.

FT ZN_FING 606 628 C2H2-TYPE 5.
FT ZN_FING 634 656 C2H2-TYPE 6.

FT ZN_FING 652 684 C2H2-TYPE 7.
FT ZN_FING 686 709 C2H2-TYPE 8.

FT CONFLICT 203 203 T -> N (IN REF. 2).
FT CONFLICT 334 334 T -> I (IN REF. 2).

FT CONFLICT 633 644 RYVCSICDQGNF -> SGEIGSKPVK (IN REF. 2).
SQ SEQUENCE 713 AA; 82003 MW; 712DFE75C9DB302 CRC64;

Query Match 13.4%; Score 59.5; DB 1; Length 713;
Best Local Similarity 36.4%; Pred. No. 40;
Matches 16; Conservative 7; Mismatches 16; Indels 5; Gaps 2;

QY 4 SSLSSL-VQVQRTSYNFCRTFLGLDKNCACIGTSICKKFKKEE 46

Db 196 SSVSKLSTPKERVSRFCRSP----TCDSCGFGPSCXKLDHVV 235

RESULT 24

ZBT1 MOUSE
ID ZBT1 MOUSE STANDARD; PRT; 713 AA.

AC Q9IVL9; Q8CDP7;
DT 10-OCT-2003 (Rel. 42, Created)

DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)

DE Zinc finger and BTB domain containing protein 1.
GN ZBT1.

OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
CX NCBI_TaxID=10090;
RN [1]

RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Embryo;

RX MEDLINE=22354683; PubMed=1246851;
RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,

RA Nakaide I., Oeato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gotohori T.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA Blake J.A., Bratt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,

RA Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
 RA Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
 RA G-immond S., Gusticich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
 RA Kanai A., Kawai H., Kawasawa Y., Kedziński R.M., King B.L.,
 RA Kongaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
 RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
 RA Nagashima T., Numata K., Okido T., Pavan W.C., Perle G., Pesole G.,
 RA Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
 RA Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
 RA Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
 RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
 RA Verardo R., Wagner L., Winkler C., Wang Y., Watanabe Y., Wells C.,
 RA Wu Z., Zavalon M., Zhu Y., Zimmer A., Yamanaka M., Yang L., Yang L.,
 RA Hirozane-Kishikawa T., Kono H., Nakamura M., Sakazume N., Sato K.,
 RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
 RA Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
 RA Miyazaki A., Sakai K., Sakaki D., Shibata K., Shinagawa A., J.,
 RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
 RA Birney E., Hayashizaki Y.;
 RA "Analysis of the mouse transcriptome based on functional annotation of
 RT 60,770 full-length cDNAs";
 RL Nature 420:563-573(2002).
 RN [2]
 RC SEQUENCE FROM N.A.
 RP TISSUE=Breast tumor;
 RX MEDLINE=22388257; PubMed=12477932;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heih F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udén T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Sunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield J.S.N., Krzywinski M.I., Skalska U., Smallus D.E.,
 RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RA "Generation and initial analysis of more than 15,000 full-length
 RT human and mouse cDNA sequences";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16593-16903(2002).
 CC -1- FUNCTION: May be involved in transcriptional regulation.
 CC -1- SUBCELLULAR LOCATION: Nuclear (Potential).
 CC -1- SIMILARITY: Contains 1 BTB/POZ domain.
 CC -1- SIMILARITY: Contains 8 C2H2-type zinc fingers.
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 CC -----
 DR EMBL; AK029762; BAC26603.1; -;
 DR EMBL; AK035036; BAC28921.1; -;
 DR EMBL; AK049397; BAC3733.1; -;
 DR EMBL; BC012239; AAH12239.1; -;
 DR MGD; MGI-2442326; C430003J21R1K.
 DR InterPro; IPR000210; BTB_POZ
 DR InterPro; IPR007087; Znf_C2H2.
 DR Pfam; PF00651; BTB; 1.
 DR Pfam; PF00096; zf-C2H2; 8.
 DR SMART; SM00225; BTB; 1.
 DR SMART; SM00355; Znf_C2H2; 8.
 DR PROSITE; PS50097; BTB; 1
 DR PROSITE; PS00028; ZINC_FINGER_C2H2_1; 4.

DR PROSITE; PS50157; ZINC_FINGER_C2H2_2; 4;
 KW Transcription regulation; DNA-binding; Zinc-finger; Metal-binding;
 FT Nuclear protein; Repeat.
 FT DOMAIN 24 91
 FT ZN FING 216 238
 FT ZN FING 448 470
 FT ZN FING 534 556
 FT ZN FING 578 600
 FT ZN FING 628 628
 FT ZN FING 634 656
 FT ZN FING 662 684
 FT ZN FING 686 709
 FT ZN FING 643 643
 FT CONFLICT 643 643 N -> K (IN REF. 1; BAC26603).
 SQ SEQUENCE 713 AA; 81951 MW; 7ED75A1E9C88500 CRC64;
 Query Match 13.4%; Score 59.5; DB 1; Length 713;
 Best Local Similarity 36.4%; Pred. No. 40;
 Matches 16; Conservative 7; Mismatches 16; Indels 5; Gaps 2;
 QY 4 SSLSI-VPOVRVSYNGRTFLGLDKNACIGTICKKFFKEI 46
 DB 196 SSVSKLSTPKERVSRPRGRSF---TCDSCGFGFSCCKLDEHV 235
 RESULT 25
 HMDH SCHPO STANDARD; PRT; 1053 AA.
 ID AC Q10283; O74425;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 16-OCT-2001 (Rel. 40, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE 3-hydroxy-3-methylglutaryl-coenzyme A reductase (EC 1.1.1.34) (HMG-CoA
 DE reductase).
 GN HMG1 OR SPCC162.09C.
 OS Schizosaccharomyces pombe (Fission yeast).
 OC Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
 OC Schizosaccharomycetales; Schizosaccharomycetaceae;
 OC Schizosaccharomycetes.
 OX NCBI_TaxID=4896;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97051601; PubMed=8896278;
 RA Lum P.Y., Edwards S., Wright R.;
 RT "Molecular, functional and evolutionary characterization of the gene
 RT encoding HMG-CoA reductase in the fission yeast, Schizosaccharomycetes
 RT pombe.";
 RL Yeast 12:1107-1124(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=972;
 RX MEDLINE=21848401; PubMed=11859360;
 RA Wood V., Gwilliam R., Rajandream M.A., Lyne M., Lyne R., Stewart A.,
 RA Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
 RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
 RA Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
 RA Gentles S., Goble A., Hamlin N., Harris P., Hidalgo J., Hodgson G.,
 RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
 RA James K., Jones L., Jones M., Leather S., McDonald S., McLean J.,
 RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
 RA Oliver K., O'Neill S., Pearson D., Quail M.A., Rabinowitsch E.,
 RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
 RA Skelton J., Simmonds M., Squares S., Stevens K.,
 RA Taylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S.,
 RA Woodward J., Voickart G., Aert R., Robben J., Grymonprez B.,
 RA Weltgens I., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
 RA Gabel C., Fuchs M., Fritz C., Holzer E., Moestl D., Hubert H.,
 RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
 RA Eger P., Zimmermann M., Wedler H., Wambutt R., Purnelle B.,
 RA Goffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
 RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
 RA Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Thode G.,
 RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
 RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,

RA Cerrutti L., Lowe C., McCombie W.R., Paulsen I., Potashkin J.,
RA Shipakovski G.V., Ussey D., Barrell B.G., Nurse P.;
RT "The genome sequence of Schizosaccharomyces pombe.";
RL Nature 415:871-880(2002).
CC -1- FUNCTION: INVOLVED IN THE CONTROL OF CHOLESTEROL BIOSYNTHESIS. IT
CC IS THE RATE-LIMITING ENZYME OF THE STEROL BIOSYNTHESIS.
CC -1- CATALYTIC ACTIVITY: (R)-mevalonate + CoA + 2 NADP(+) = {S}-3-
CC hydroxy-3-methylglutaryl-CoA + 2 NADPH.
CC -1- PATHWAY: Cholesterol biosynthesis.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein. Endoplasmic
CC reticulum.
CC -1- SIMILARITY: Belongs to the HMG-CoA reductase family.
CC
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CC
CC EMBL; L76979; AAB39277.1; -;
CC EMBL; AL023360; CAA19589.1; -;
CC PIR; S72194; S72194.
CC GeneDB Spombe; SPC1162.09c; -;
CC InterPro; IPR002202; HMG-CoA red.
CC InterPro; IPR009023; HMG CoA NAD bind.
CC InterPro; IPR004554; HMG CoA R NADP.
CC InterPro; IPR009029; HMG CoA sub bind.
CC InterPro; IPR000731; SSD 5TM.
CC Pfam; PF00368; HMG-CoA red; 1.
CC PRINTS; PR00071; HMGCOARCTASE.
CC TIGRfam; TIGR00533; HMG CoA R NADP; 1.
CC PROSITE; PS00066; HMG CoA REDUCTASE_1; 1.
CC PROSITE; PS00318; HMG CoA REDUCTASE_2; 1.
CC PROSITE; PS01192; HMG CoA REDUCTASE_3; 1.
CC PROSITE; PS00065; HMG CoA REDUCTASE_4; 1.
CC PROSITE; PS01156; SSD; 1.
CC Oxidoreductase; Glycoprotein; Endoplasmic reticulum; Transmembrane;
KW Cholesterol biosynthesis; NADP
FT DOMAIN 1 547 MEMBRANE-BOUND.
FT DOMAIN 548 615 LINKER.
FT DOMAIN 616 1053 CATALYTIC.
FT TRANSMEM 9 29 POTENTIAL.
FT TRANSMEM 204 224 POTENTIAL.
FT TRANSMEM 233 253 POTENTIAL.
FT TRANSMEM 259 279 POTENTIAL.
FT TRANSMEM 321 341 POTENTIAL.
FT TRANSMEM 342 362 POTENTIAL.
FT TRANSMEM 418 438 POTENTIAL.
FT TRANSMEM 527 547 POTENTIAL.
FT ACT_SITE 712 712 BY SIMILARITY.
FT ACT_SITE 922 922 BY SIMILARITY.
FT ACT_SITE 1018 1018 GENERAL BASE (BY SIMILARITY).
FT CARBOHYD 137 137 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 339 339 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 518 518 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 578 578 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 776 776 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 1022 1022 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CONFLICT 751 751 N -> D (IN REF. 1).
SQ SEQUENCE 1053 AA; 114876 MW; 3352365222D238 CRC64;

Query Match 13.4%; Score 59.5; DB 1; Length 1053;
Best Local Similarity 37.5%; Pred. No. 63;
Matches 18; Conservative 5; Mismatches 13; Indels 7; Gaps 3;
QY 30 NACI---GTSICKKFFKEIRSDNWLASHLGLPPDLSLYPNYSDS 74
Db 117 NDCIFHDAGSACHFFKFE---VGNMTVSSIAL-PSNLNPPIDYFLDS 160
RESULT 26

UTY_MOUSE
ID UTY_MOUSE STANDARD; ERT; 1212 AA.
AC P79457; O97979;
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Ubiquitously transcribed Y chromosome tetratricopeptide repeat protein
DE (Ubiquitously transcribed TPR protein ON the Y chromosome) (Male-
DE specific histocompatibility antigen H-YDB).
GN UTY.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=RIII; TISSUE=Testis;
RX MEDLINE=98409500; PubMed=9736773;
RA Mazyrat S., Saut N., Sargent C.A., Grimond S., Longepied G.,
RA Ehrmann I.E., Ellis P.S., Greenfield A., Affara N.A., Mitchell M.J.;
RT "The mouse Y chromosome interval necessary for spermatogonial
RT proliferation is gene dense with syntenic homology to the human AZFa
RT region.";
RL Hum. Mol. Genet. 7:1713-1724(1998).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Swiss;
RX MEDLINE=97099462; PubMed=8944031;
RA Greenfield A., Scott D., Pennisi D., Ehrmann I., Ellis P.S.,
RA Cooper L., Simpson E., Koopman P.;
RT "An H-YDB epitope is encoded by a novel mouse Y chromosome gene.";
RL Nat. Genet. 14:474-478(1996).
RN [3]
RP INTERACTION WITH TLE1 AND TLE2.
RX MEDLINE=99072804; PubMed=9854018;
RA Gravec D., Lo R., Liu Y., Greenfield A., Stifani S.;
RT "Groucho/transducin-like enhancer of split (TLE) family members
RT interact with the yeast transcriptional co-repressor Ssn6 and
RT mammalian SSN6-related proteins: implications for evolutionary
RT conservation of transcription repression mechanisms.";
RL Biochem. J. 337:13-17(1999).
CC -1- SUBUNIT: Binds TLE1 and TLE2.
CC -1- SUBCELLULAR LOCATION: Nuclear (Potential).
CC -1- SIMILARITY: Contains 6 TPR repeats.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; AF057367; AAC67385.1; -;
CC EMBL; Y09222; CAA70422.1; -;
CC PIR; T42387; T42387.
CC PIR; T42729; T42729.
CC MGI; MGI:894810; Uty.
CC InterPro; IPR003347; TF JmJC.
CC InterPro; IPR008941; TPR-like.
CC InterPro; IPR001440; TPR.
CC Pfam; PF02373; JmJC; 1.
CC Pfam; PF00515; TPR; 7.
CC SMART; SM00558; JmJC; 1.
CC SMART; SM00028; TPR; 6.
KW Repeat; TPR repeat; Nuclear protein.
FT REPEAT 91 119 TPR 1.
FT REPEAT 128 156 TPR 2.
FT REPEAT 165 193 TPR 3.
FT REPEAT 203 231 TPR 4.
FT REPEAT 316 344 TPR 5.
FT REPEAT 350 378 TPR 6.
FT CONFLICT 1069 1069 E -> Q (IN REF. 2).

FT CONFLICT 1149 1212 EVNLLFTVNSGSKYIIVHCNCARKTSNLENFVLEQ
 FT YMEDLQVYDOFTLAPSSAS -> STRDLPLQHLQOC
 FT HQGPDKAAIALEFHTEGSDMH (IN REF. 21)
 SQ SEQUENCE 1212 AA; 136736 MW; 2AE1A816F3D6ACB5 CRC64;
 Query Match 13.4%; Score 59.5; DB 1; Length 1212;
 Best Local Similarity 28.3%; Pred. No. 74; Indels 11; Gaps 2;
 Matches 17; Conservative 9; Mismatches 23; Indels 11; Gaps 2;
 QY 18 NFRGTFGLGDKNCACIG-----TSCKKFFKEIRSDNW-----LASHLGLPPDSLSLY 65
 Db 277 NSQSWYFLRCYSLGKQVDAFVSRSQSDKSEASADTWCSTGLVLYQQNQPMALQAY 336
 RESULT 27
 YM99_YEAST
 ID YM99_YEAST STANDARD; PRC; 105 AA.
 AC Q04698;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE Hypothetical 11.6 kDa protein in FET4-ERR1 intergenic region.
 GN YMR321C OR YMR924.13C.
 CS Saccharomyces cerevisiae (Baker's yeast).
 CC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
 CC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
 CX NCBI_TaxID=4932;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=S288C / AB972;
 RX MEDLINE=97313268; PubMed=9169872;
 RA Bowman S., Church C.M., Badcock K., Brown D., Chillingworth T.,
 RA Connor R., Dedman K., Devlin K., Gentles S., Hamlin K., Hunt S.,
 RA Jagals K., Lye G., Moulé S., Odell C., Pearson D., Rajadream M.A.,
 RA Rice P., Skelton J., Walsh S., Whitehead S., Barrell B.G.;
 RT The nucleotide sequence of Saccharomyces cerevisiae chromosome
 XIII.
 RL Nature 387:90-93(1997).
 CC - SIMILARITY: TO YEAST YPL273W AND YLL062C AND TO E. COLI YAGD.
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 or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL: Z54141; CAA90839.1; -.
 DR PIR: S69879; S69879.
 DR Germonline; 143002; -.
 DR SGD: S0004940; YMR321C.
 DR InterPro: IPR003726; S_methyl_trans.
 DR Pfam: PF02574; S_methyl_trans; 1.
 KM Hypothetical protein.
 SQ SEQUENCE 105 AA; 11622 MW; 4A252F6A58DA6178 CRC64;
 Query Match 13.3%; Score 59; DB 1; Length 105;
 Best Local Similarity 30.6%; Pred. No. 5;
 Matches 19; Conservative 11; Mismatches 14; Indels 18; Gaps 4;
 QY 22 TFLGDKNCACIGTSICKKFFKEIRSDNWLAS-HLGLPPDSLSYDAN---YSDDSKIW 77
 Db 13 SFLGIN-----CVSFN-----QSPDILESILHQLPNWALLAYPNSGEVYDTERKIW 58
 QY 78 RP 79
 Db 59 LP 60
 RESULT 28
 RECA_MYCPE
 ID RECA_MYCPE STANDARD; PRT; 329 AA.
 AC P31257;
 DT 01-JUL-1993 (Rel. 26, Created)
 DT 01-JUL-1993 (Rel. 26, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE Hoxeobox protein Hox-C10 (Hox-3.6).
 GN HOXC10 OR HOXC-10 OR HOX-3.6.
 OS Mus musculus (Mouse).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 CX NCBI_TaxID=10090;

AC 08EVC7;
 DT 10-OCT-2003 (Rel. 42, Created)
 DT 10-OCT-2003 (Rel. 42, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE RECA protein (Recombinase A).
 GN RECA OR MYPE6390.
 OS Mycoplasma penetrans.
 CC Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.
 CX NCBI_TaxID=28227;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=HF-2;
 RX MEDLINE=22354719; PubMed=12466555;
 RA Sasaki Y., Ishikawa J., Yamashita A., Oshima K., Kenri T., Furuya K.,
 RA Yoshino C., Horino A., Shiba T., Sasaki T., Hattori M.;
 RT "The complete genomic sequence of Mycoplasma penetrans, an
 intracellular bacterial pathogen in humans.";
 RL Nucleic Acids Res. 30:5293-5300(2002).
 CC - FUNCTION: Can catalyze the hydrolysis of ATP in the presence of
 single-stranded DNA, the ATP-dependent uptake of single-stranded
 DNA by duplex DNA, and the ATP-dependent hybridization of
 homologous single-stranded DNAs. It interacts with lexA causing
 its activation and leading to its autocatalytic cleavage (By
 similarity).
 CC - SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
 CC - SIMILARITY: Belongs to the recA family.
 CC -----
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 or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL: AP004172; BAC44429.1; -.
 DR HAMAP; MF 00268; -; 1.
 DR InterPro: IPR003593; AAA_ATPase.
 DR InterPro: IPR001553; RecA.
 DR Pfam: PF00154; recA; 1.
 DR PRINTS; PR00142; RECA.
 DR ProDom; PD000229; RecA; 1.
 DR SMART; SM00382; AAA; 1.
 DR PROSITE; PS00321; RECA_1; 1.
 DR PROSITE; PS00162; RECA_2; 1.
 DR PROSITE; PS00163; RECA_3; 1.
 KW DNA damage; DNA recombination; SOS response; ATP-binding; DNA-binding;
 KM Complete proteome.
 FT NP BIND 63 70 ATP (BY SIMILARITY).
 SQ SEQUENCE 329 AA; 36754 MW; A879BF750B79EB1 CRC64;
 Query Match 13.3%; Score 59; DB 1; Length 329;
 Best Local Similarity 27.3%; Pred. No. 19;
 Matches 15; Conservative 7; Mismatches 33; Indels 0; Gaps 0;
 QY 20 GRTEFLGDKNCACIGTSICKKFFKEIRSDNWLAS-HLGLPPDSLSYDANYSDD 74
 Db 68 KRTIALQCYKEIKEGSVAYIDAECSIDSKSLHLGIDPTKLIVATPEYGEQA 122
 RESULT 29
 HXCA_MOUSE
 ID HXCA_MOUSE STANDARD; PRT; 342 AA.
 AC P31257;
 DT 01-JUL-1993 (Rel. 26, Created)
 DT 01-JUL-1993 (Rel. 26, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE Hoxeobox protein Hox-C10 (Hox-3.6).
 GN HOXC10 OR HOXC-10 OR HOX-3.6.
 OS Mus musculus (Mouse).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 CX NCBI_TaxID=10090;

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RN RP SEQUENCE FROM N.A.
RC STRAIN=CD-1;
RX MEDLINE=92360500; PubMed=1353983;
RA Peterson R.J.; Jacobs D.F.; Angilewitsch A.;
RT "Hox-3.6: isolation and characterization of a new murine homeobox
RL gene located in the 5' region of the Hox-3 cluster.";
RN Mech. Dev. 37:151-166(1992).
[2]
RN RP SEQUENCE OF 289-313 FROM N.A.
RX MEDLINE=92073357; PubMed=1720547;
RA Murtha M.T.; Leckman J.F.; Ruddle F.H.;
RT "Detection of homeobox genes in development and evolution.";
RN Proc. Natl. Acad. Sci. U.S.A. 88:10711-10715(1991).
CC -!- FUNCTION: Sequence-specific transcription factor which is part of
CC a developmental regulatory system that provides cells with
CC specific positional identities on the anterior-posterior axis.
CC -!- SUBCELLULAR LOCATION: Nuclear.
CC -!- SIMILARITY: Belongs to the Abd-B homeobox family.
CC
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CC
CC EMBL; X63507; -; NOT ANNOTATED_CDS.
CC EMBL; M81658; AAA63310.1; -.
CC PIR; A56552; A56552.
CC HSSP; P02833; 9ANT.
CC TRANSFAC; T03350; -.
CC MGD; MGI:96192; Hoxc10.
CC InterPro; IPR001356; Homeobox.
CC Pfam; PF00046; homeobox; 1.
CC PRINTS; PR00024; HOMEBOX.
CC ProDom; PD000010; Homeobox; 1.
CC SMART; SM00389; HOX; 1.
CC PROSITE; PS00027; HOMEBOX_1; 1.
CC PROSITE; PS00071; HOMEBOX_2; 1.
CC Homeobox; DNA-binding; Developmental protein; Nuclear protein;
KW Transcription regulation.
FT DNA BIND 268 327
FT SEQUENCE 342 AA; 38195 MW; 7BB2E117A768F52B CRC64;
CC
CC Query Match 13.3%; Score 53; DB 1; Length 342;
CC Best Local Similarity 30.1%; Pred. No. 20;
CC Matches 25; Conservative 9; Mismatches 47; Indels 2; Gaps 2;
CC
CC 1 LPASSLSILVPOVRTSYNFGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPFP 60
CC 133 LPESCIGEHEVFPVPSYRASPYSALDKTFHCAGANEFEAPF-EQFASLNPRTEHLESQ 191
CC
CC 61 -DSLSYPANYSDDSKIWRPVEI 82
CC 192 LGGKVSFPETPKSDSQTPSPNEI 214
CC
CC RESULT 30
CC YC37 PORPU STANDARD; PRT; 173 AA.
CC ID YC37 PORPU
CC AC P51131;
CC DT 01-OCT-1996 (Rel. 34, Created)
CC DT 01-OCT-1996 (Rel. 34, Last sequence update)
CC DT 15-DEC-1998 (Rel. 37, Last annotation update)
CC DE Hypothetical 20.0 kDa protein ycf37 (ORF173).
CC GN YCF37.
CC OS Porphyra purpurea.
CC OG Chloroplast.
CC EC Eukaryota; Rhodophyta; Bangiophyceae; Bangiales; Porphyra.
CC NCBI_TaxID=2787;
CC [1]
```

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RP SEQUENCE FROM N.A.
RC STRAIN=Avonport;
RA Reith M.E.; Munnholland J.;
RT "Complete nucleotide sequence of the Porphyra purpurea chloroplast
RT genome.";
RL Plant Mol. Biol. Rep. 13:333-335(1995).
CC -!- SIMILARITY: BELONGS TO THE YCF37 FAMILY.
CC
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CC
CC EMBL; U38804; AAC06077.1; -.
CC PIR; S73112; S73112.
CC InterPro; IPR008941; TPR-like.
CC InterPro; IPR001440; TPR.
CC Pfam; PF00515; TPR; 2.
CC Chloroplast; Hypothetical protein.
CC SEQUENCE 173 AA; 20008 MW; D0A4C6201CB8C6B8 CRC64;
CC
CC Query Match 13.2%; Score 58.5; DB 1; Length 173;
CC Best Local Similarity 33.3%; Pred. No. 10;
CC Matches 18; Conservative 9; Mismatches 22; Indels 5; Gaps 1;
CC
CC 24 LGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPDPDSLLSYPNANYSDDSKIW 77
CC 50 LGIEDGFAPSKVCIKKYIFTRAL-----TESHLVLKNSLLESFENAA-IKKLY 98
CC
CC Search completed: June 14, 2004, 07:56:55
CC Job time : 7.57736 secs
```

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OM protein - protein search, using sw model

Run on: June 14, 2004, 07:54:00 ; Search time 21.9245 Seconds

(without alignments)

1194.462 Million cell updates/sec

Title: US-10-054-988-114_COPY_32_114

Perfect score: 444

Sequence: 1 LPASSLSLVPQRTSYNFG.....LSYPANYSBDSXMRPVEIF 83

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

SPTREMBL 25:*

1: sp_archaea:*

2: sp_bacteria:*

3: sp_fungi:*

4: sp_human:*

5: sp_invertebrate:*

6: sp_mammal:*

7: sp_mhc:*

8: sp_organelle:*

9: sp_plant:*

10: sp_phage:*

11: sp_rodent:*

12: sp_virus:*

13: sp_vertebrate:*

14: sp_unclassified:*

15: sp_rvirus:*

16: sp_bacteriap:*

17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	444	100.0	166	4 Q8WX00	Q8WX00 homo sapien
2	444	100.0	182	4 Q9H7Y0	Q9H7Y0 homo sapien
3	347	78.2	435	11 Q8C1F9	Q8C1F9 mus musculus
4	82.5	18.6	430	4 Q8NDZ4	Q8NDZ4 homo sapien
5	72.5	16.3	424	16 Q8Z1G9	Q8Z1G9 salmonella
6	71	16.0	176	16 Q9A1M3	Q9A1M3 streptococc
7	70.5	15.9	294	2 Q31243	Q31243 agrobacteri
8	70	15.8	739	5 Q01260	Q01260 caenorhabdi
9	70	15.8	1044	16 Q8X1N5	Q8X1N5 clostridium
10	69.5	15.7	534	16 Q8ZC03	Q8ZC03 yersinia pe
11	69.5	15.7	534	16 Q8CLM3	Q8CLM3 yersinia pe
12	69	15.5	201	12 Q8CQM5	Q8CQM5 porcine rep
13	69	15.5	300	4 Q86H79	Q86H79 homo sapien
14	68.5	15.4	424	16 Q93GQ6	Q93GQ6 salmonella
15	68	15.3	295	2 Q9AH13	Q9AH13 rhodococcus
16	68	15.3	295	2 Q8GFF8	Q8GFF8 rhodococcus

17	68	15.3	985	3	O59773	O59773 schizosacch
18	67.5	15.2	390	16	Q8XB85	Q8XB85 escherichia
19	67.5	15.2	390	16	Q8FA92	Q8FA92 escherichia
20	67	15.1	1283	10	Q8LIW4	Q8LIW4 oryza sativ
21	66.5	15.0	423	2	Q9ZA91	Q9ZA91 shigella fl
22	66	14.9	218	16	Q88AX3	Q88AX3 pseudomonas
23	66	14.9	421	4	Q8NA05	Q8NA05 homo sapien
24	65.5	14.8	348	16	Q8EBK4	Q8EBK4 shewanella
25	65.5	14.8	572	16	Q8Y842	Q8Y842 listeria mo
26	65	14.6	387	11	Q8CDP2	Q8CDP2 mus musculu
27	64.5	14.5	424	2	Q9EUJ0	Q9EUJ0 salmonella
28	64.5	14.5	637	10	Q7XTQ7	Q7XTQ7 oryza sativ
29	64	14.5	1498	16	Q8CMR9	Q8CMR9 staphylococ
30	64	14.4	446	16	Q8REM3	Q8REM3 fusobacteri
31	63.5	14.3	232	10	Q8SB32	Q8SB32 oryza sativ
32	63.5	14.3	352	4	Q8NEE3	Q8NEE3 homo sapien
33	63.5	14.3	468	3	P87276	P87276 saccharomyc
34	63.5	14.3	470	3	P87278	P87278 saccharomyc
35	63.5	14.3	470	3	P87277	P87277 saccharomyc
36	63.5	14.3	470	3	Q9UVH5	Q9UVH5 saccharomyc
37	63.5	14.3	470	3	Q6E719	Q6E719 saccharomyc
38	63	14.2	398	4	Q8NAX2	Q8NAX2 homo sapien
39	62.5	14.1	275	10	Q8H768	Q8H768 oryza sativ
40	62.5	14.1	1224	13	Q7T024	Q7T024 brachydanio
41	62	14.0	1766	13	Q8AW45	Q8AW45 brachydanio
42	62	14.0	103	12	Q91BP1	Q91BP1 porcine rep
43	62	14.0	103	12	Q91BN9	Q91BN9 porcine rep
44	62	14.0	103	12	Q91BN6	Q91BN6 porcine rep
45	62	14.0	103	12	Q91BN7	Q91BN7 porcine rep
46	62	14.0	103	12	Q91BP0	Q91BP0 porcine rep
47	62	14.0	103	12	Q91BN8	Q91BN8 porcine rep
48	62	14.0	201	12	Q8JYE8	Q8JYE8 porcine rep
49	62	14.0	201	12	O55478	O55478 porcine rep
50	62	14.0	266	16	Q8EZD9	Q8EZD9 leptospira
51	62	14.0	297	5	Q8MQD9	Q8MQD9 caenorhabdi
52	62	14.0	414	5	Q17994	Q17994 caenorhabdi
53	62	14.0	452	10	Q9LX41	Q9LX41 arabidopsis
54	62	14.0	459	10	Q949V7	Q949V7 arabidopsis
55	61.5	13.9	260	16	Q8D8T2	Q8D8T2 vibrio vuln
56	61.5	13.9	626	5	Q9XYR4	Q9XYR4 schistosoma
57	61.5	13.9	642	5	Q86IP2	Q86IP2 dictyostel
58	61.5	13.9	676	16	Q8YSG6	Q8YSG6 anabaena sp
59	61.5	13.9	813	5	Q76216	Q76216 drosophila
60	61	13.7	126	12	Q9DKL5	Q9DKL5 spodoptera
61	61	13.7	201	12	Q8JYE6	Q8JYE6 porcine rep
62	61	13.7	203	2	Q8GFF5	Q8GFF5 nocardioide
63	61	13.7	240	16	Q7VAP8	Q7VAP8 prochloroco
64	61	13.7	260	2	Q8GFF4	Q8GFF4 cellulomona
65	61	13.7	324	13	Q9PVU1	Q9PVU1 brachydanio
66	61	13.7	325	3	Q88985	Q88985 saccharomyc
67	61	13.7	782	5	Q9V3X9	Q9V3X9 drosophila
68	61	13.7	1159	16	Q9FCK5	Q9FCK5 streptomyce
69	61	13.7	1405	5	Q9VSA4	Q9VSA4 drosophila
70	61	13.7	1405	5	Q8MT49	Q8MT49 drosophila
71	61	13.7	1482	5	Q8I3M8	Q8I3M8 plasmodium
72	61	13.7	2674	12	Q7T6T6	Q7T6T6 ectropis ob
73	60.5	13.6	343	16	Q9RZB5	Q9RZB5 deinococcus
74	60.5	13.6	401	10	Q82158	Q82158 populus nig
75	60.5	13.6	401	10	Q84TL2	Q84TL2 populus tre
76	60.5	13.6	677	16	Q8YZL9	Q8YZL9 anabaena sp
77	60.5	13.6	1586	10	Q7XJX0	Q7XJX0 oryza sativ
78	60	13.5	197	16	Q8DS17	Q8DS17 streptococc
79	60	13.5	322	16	Q8F1L4	Q8F1L4 leptospira
80	60	13.5	342	11	Q7TMT7	Q7TMT7 mus musculu
81	60	13.5	438	5	O16753	O16753 caenorhabdi
82	60	13.5	1133	13	Q7SYB6	Q7SYB6 brachydanio
83	60	13.5	1203	10	Q9SN55	Q9SN55 arabidopsis
84	60	13.5	1633	10	Q81617	Q81617 arabidopsis
85	60	13.5	3121	5	Q9VH10	Q9VH10 drosophila
86	59.5	13.4	178	5	Q8WR39	Q8WR39 anopheles g
87	59.5	13.4	195	11	Q8C704	Q8C704 mus musculu
88	59.5	13.4	243	12	O55600	O55600 garlic viru
89	59.5	13.4	255	16	Q87B21	Q87B21 xylella fas

90 59.5 13.4 274 10 Q82551 Oryza sativ
 91 59.5 13.4 283 16 Q82524 Oryza sativ
 92 59.5 13.4 346 12 Q9YML4 Oryza sativ
 93 59.5 13.4 417 4 Q865W8 Homo sapiens
 94 59.5 13.4 508 10 Q9C804 Arabidopsis
 95 59.5 13.4 600 10 Q8Y84 Arabidopsis
 96 59.5 13.4 785 11 Q8BNG6 Mus musculus
 97 59.5 13.4 787 4 Q8TEV9 Mus musculus
 98 59.5 13.4 800 11 Q8BKB5 Mus musculus
 99 59.5 13.4 813 5 Q9VWZ1 Mus musculus
 100 59.5 13.4 900 11 Q8BY46 Mus musculus

ALIGNMENTS

RESULT 1
 Q8WX00 PRELIMINARY; PRT; 166 AA.
 AC Q8WX00;
 DT 01-MAR-2002 (TrEMBLrel. 20, Created)
 DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
 DT 01-MAR-2002 (TrEMBLrel. 24, Last annotation update)
 DE BA435K1.1 (Novel protein) (Fragment).
 GN BA435K1.1.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Lawlor S.;
 RL Submitted (DEC-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AL591491; CAB13523.1; -.
 FT NCON TER 166
 SQ SEQUENCE 166 AA; 18711 MW; E23F4A20F02E74C1 CRC64;
 Query Match 100.0%; Score 444; DB 4; Length 166;
 Best Local Similarity 100.0%; Pred. No. 2.9e-46;
 Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
 DB 32 LPASSLSLVPOVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
 QY 61 DSLLSYPNYSDSKIWPRVEIF 83
 DB 92 DSLLSYPNYSDSKIWPRVEIF 114
 RESULT 2
 Q9H7Y0 PRELIMINARY; PRT; 182 AA.
 AC Q9H7Y0;
 DT 01-MAR-2001 (TrEMBLrel. 16, Created)
 DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Hypothetical protein FLJ14103.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Mammary gland;
 RA Isoq T., Oca T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y.,
 RA Nishikawa T., Nagai K., Sugano S., Shiratori A., Sudo H.,
 RA Negatsuma M., Hosoi T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
 RA Watanabe S., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi S.,
 RA Yamamoto J., Kimura K., Murakami K., Ishii S., Kawai Y., Saito K.,
 RA Ninomiya K., Iwavanagi T.,
 RA "NEDO human cDNA sequencing project.";
 RT

RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AK024165; BAB14843.1; -.
 KW Hypothetical protein.
 SQ SEQUENCE 182 AA; 20643 MW; CA22BB5607329427 CRC64;
 Query Match 100.0%; Score 444; DB 4; Length 182;
 Best Local Similarity 100.0%; Pred. No. 3.2e-46;
 Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
 DB 32 LPASSLSLVPOVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 91
 QY 61 DSLLSYPNYSDSKIWPRVEIF 83
 DB 92 DSLLSYPNYSDSKIWPRVEIF 114
 RESULT 3
 Q8C3I9 PRELIMINARY; PRT; 435 AA.
 AC Q8C3I9;
 DT 01-MAR-2003 (TrEMBLrel. 23, Created)
 DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Hypothetical P-loop containing nucleotide triphosphate hydrolases
 DE structure containing protein.
 GN 4930578C19RIK.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Heart;
 RX MEDLINE=22354683; PubMed=12466851;
 RA The FANTOM Consortium,
 RA the RIKEN Genome Exploration Research Group Phase I & II Team;
 RT "Analysis of the mouse transcriptome based on functional annotation of
 RT 60,770 full-length cDNAs.";
 RL Nature 420:563-573(2002).
 DR EMBL; AK085770; BAC39535.1; -.
 DR MGI:1923155; 4930578C19RIK.
 KW Hypothetical protein.
 SQ SEQUENCE 435 AA; 49042 MW; 0A1B466BB04CEBID CRC64;
 Query Match 78.2%; Score 347; DB 11; Length 435;
 Best Local Similarity 81.7%; Pred. No. 6.7e-34;
 Matches 67; Conservative 3; Mismatches 12; Indels 0; Gaps 0;

QY 1 LPASSLSLVPOVTSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 60
 DB 34 LPASLPSPVPRVSSYNGRTFLGLDKCNACIGTSICKKFFKEIRSDNWLASHLGLPP 93
 QY 61 DSLLSYPNYSDSKIWPRVEIF 82
 DB 94 QDLHSYAANYSDSKIWPRVEIF 115
 RESULT 4
 Q8NDZ4 PRELIMINARY; PRT; 430 AA.
 AC Q8NDZ4;
 DT 01-OCT-2002 (TrEMBLrel. 22, Created)
 DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
 DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
 DE Hypothetical protein.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.

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RC TISSUE-Testis;
RA Strausberg R.;
RL Submitted (SEP-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC037293; AAH37293.1; -.
KW Hypothetical protein.
SQ SEQUENCE 430 AA; 49481 MW; EB72CACF14E71457 CRC64;

Query Match      18.6%; Score 82.5; DB 4; Length 430;
Best Local Similarity 32.3%; Pred. No. 0.16;
Matches 20; Conservative 11; Mismatches 20; Indels 11; Gaps 2;

QY 1 LPASSLSIV-----POVRTSYN----FGTFELGDKNCACIGTSICKKFFKEIRSD 49
DB 16 LKLAALGSLVLMVLSHPSLLASWORNELTDREFLQNKCPACFGTSCWRFGVQVFE 75

QY 50 NW 51
DB 76 AW 77

RESULT 5
Q821G9 PRELIMINARY; PRT; 424 AA.
AC Q821G9;
DT 01-MAR-2002 (TremBLrel. 20, Created)
DT 01-MAR-2002 (TremBLrel. 20, Last sequence update)
DT 01-JUN-2003 (TremBLrel. 24, Last annotation update)
DE UV protection protein.
GN SAMB OR STY4597 OR "4291.
OS Salmonella typhi.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Salmonella.
CX NCBI_TaxID=601;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=CT18;
RX MEDLINE=21534947; PubMed=11677608;
RA Parkhill J., Dougan G., James K.D., Thomson N.R., Pickard D., Wain J.,
RA Churcher C., Mungall K.L., Bentley S.D., Holden M.T.G., Sebaihia M.,
RA Baker S., Basham D., Brooks K., Chillingworth T., Connor P.,
RA Cronin A., Davis P., Davies R.M., Dowd L., White N., Farrar J.,
RA Felwell T., Hamlin N., Haque A., Hien T.T., Holroyd S., Jagels K.,
RA Krogh A., Larsen T.S., Leather S., Moule S., O'Gaora P., Parry C.,
RA Quail M., Rutherford K., Simmonds M., Skelton J., Stevens K.,
RA Whitehead S., Barrrell B.G.;
RT "Complete genome sequence of a multiple drug resistant Salmonella
RT enterica serovar Typhi CT18."
RL Nature 413:848-852(2001);
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Ty2 / ATCC 700931;
RX MEDLINE=22531367; PubMed=12644504;
RA Deng W., Liou S.-R., Plunkett G. III, Mayhew G.F., Rose D.J.,
RA Burland V., Kodoyianni V., Schwartz D.C., Blattner F.R.;
RT "Comparative genomics of Salmonella enterica serovar Typhi strains Ty2
RT and CT18."
RL J. Bacteriol. 185:2330-2337(2003).
DR EMBL; AL627283; CAD06719.1; -.
DR EMBL; AB016848; AA071749.1; -.
DR GO; GO:0006281; P:DNA repair; IEA.
DR InterPro; IPR001126; UMCUC_like.
DR Pfam; PF00817; IWS; 1.
DR PROSITE; PS50173; UMCUC; 1.
KW Complete proteome.
SQ SEQUENCE 424 AA; 47826 MW; 942565A1381361F5 CRC64;

Query Match      16.3%; Score 72.5; DB 16; Length 424;
Best Local Similarity 27.6%; Pred. No. 2.7;
Matches 21; Conservative 13; Mismatches 39; Indels 3; Gaps 2;

QY 6 LSSLPVQVRTSYNFGRTFLGDKNCACIGTSICKKFFKEIRSDNWLASHLGLPDPDSLLS 65
DB 88 LEELAPRVE-QVSDIDMFLVRNIDSCIDFDFGRLREHVHSGTGLTIGVGMGPKTILA 146

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QY 66 YPANYSDSDSKWRPVE 81
DB 147 KSAQWA--SKEWRQFE 160

RESULT 6
Q9A1M3 PRELIMINARY; PRT; 176 AA.
AC Q9A1M3;
DT 01-JUN-2001 (TremBLrel. 17, Created)
DT 01-JUN-2001 (TremBLrel. 17, Last sequence update)
DT 01-OCT-2003 (TremBLrel. 25, Last annotation update)
DE Hypothetical protein SPY0190.
GN SPY0190.
OS Streptococcus pyogenes.
OC Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
OC Streptococcus.
CX NCBI_TaxID=1314;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SF370 / ATCC 700294 / Serotype M1;
RX MEDLINE=21192684; PubMed=11296296;
RA Ferretti J.J., McShan W.M., Ajdic D.J., Savic D.J., Savic G., Lyon K.,
RA Primeaux C., Sezate S., Suvorov A.N., Kenton S., Lai H.S., Lin S.P.,
RA Qian Y., Jia H.G., Najjar F.Z., Ren Q., Zhu H., Song L., White J.,
RA Yuan X., Clifton S.W., Roe B.A., McLaughlin R.;
RT "Complete genome sequence of an M1 strain of Streptococcus pyogenes."
RL Proc. Natl. Acad. Sci. U.S.A. 98:4658-4663(2001).
DR EMBL; AE006488; AAK33290.1; -.
DR GO; GO:0005727; C:extrachromosomal circular DNA; IEA.
DR GO; GO:0003677; F:DNA binding; IEA.
DR InterPro; IPR003115; ParBc.
DR Pfam; PF02195; ParBc; 1.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 176 AA; 20598 MW; 6AD2CAP9F4CE565B CRC64;

Query Match      16.0%; Score 71; DB 16; Length 176;
Best Local Similarity 34.1%; Pred. No. 1.5;
Matches 15; Conservative 8; Mismatches 13; Indels 8; Gaps 2;

QY 47 RSDNWLASHLGLPDPDSLL-----SYPANYSDD--SKWRPVEI 82
DB 130 RSDNWLASHLGLPDPDSLLKQITGLASLFLKDFHFNQSWEPREL 173

RESULT 7
Q31243 PRELIMINARY; PRT; 294 AA.
AC Q31243;
DT 01-JAN-1998 (TremBLrel. 05, Created)
DT 01-JAN-1998 (TremBLrel. 05, Last sequence update)
DT 01-OCT-2003 (TremBLrel. 25, Last annotation update)
DE Epoxide hydrolase (EC 3.3.2.3).
GN ECHA.
OS Agrobacterium tumefaciens.
OC Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
OC Rhizobiaceae; Rhizobium/Agrobacterium group; Agrobacterium.
CX NCBI_TaxID=358;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=AD1/CF211;
RX MEDLINE=97131343; PubMed=9169427;
RA Rink R., Fennema M., Smids M., Dehm U., Janssen D.B.;
RT "Primary structure and catalytic mechanism of the epoxide hydrolase
RT from Agrobacterium radiobacter AD1."
RL J. Biol. Chem. 272:14650-14657(1997).
DR EMBL; Y12804; CAA73331.1; -.
DR PDB; 1EHY; 16-OCT-99.
DR GO; GO:0004301; F:epoxide hydrolase activity; IEA.
DR GO; GO:0016787; F:hydrolase activity; IEA.
DR InterPro; IPR000073; A/b hydrolase.
DR InterPro; IPR000639; Epox_hydrolase.

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SEQUENCE FROM N.A.
 RC STRAIN=LT2 / SGSC1412 / ATCC 700720;
 RX MEDLINE=21534948; PubMed=1677609;
 RA McClelland M., Sanderson K.E., Spieth J., Clifton S.M., Latreille P.,
 RA Courtney L., Porwollik S., Ali J., Dante M., Du P., Hou S., Layman D.,
 RA Leonard S., Nguyen C., Scott K., Holmes A., Grewal N., Mulvaney E.,
 RA Ryan B., Suc H., Florea L., Miller W., Stoneking T., Nhan M.,
 RA Waterston R., Wilson R.K.;
 RT "Complete genome sequence of *Salmonella enterica* serovar Typhimurium
 LT2.";
 RL Nature 413:852-856(2001).
 DR EMBL: AB006471; AAU23540.1; -
 DR GO: GO:0046821; C:extrachromosomal DNA; IEA.
 DR GO: GO:0006281; P:DNA repair; IEA.
 DR InterPro: IPR001126; UMCUC_like.
 DR Pfam: PF00817; IMS; 1.
 DR PROSITE: PS01173; UMCUC; 1.
 KW Plasmid; Complete proteome.
 SQ SEQUENCE 424 AA; 47700 MW; B2FE9F39C9C35652 CRC64;
 Query Match 15.4%; Score 68.5; DB 16; Length 424;
 Best Local Similarity 27.8%; Pred. No. 8.4;
 Matches 20; Conservative 13; Mismatches 36; Indels 3; Gaps 2;
 Qy 6 LSSVLPQVRSYNGRTFLGLDKNACIGTSICKKPFKEIRSDNWLASHLGLPPDSLLS 65
 Db 88 LEELAPRVE-QYSIDEMFLDIRGIDSCIDFDFGRQLREHVRSGTGLTIGVGMPTKTLA 146
 Qy 66 YPANYSDSKIW 77
 Db 147 KSAQWA--SKEN 156

RESULT 15
 Q9AH10
 ID Q9AH10 PRELIMINARY; PRT; 295 AA.
 AC Q9AH10;
 DT 01-JUN-2001 (TrEMBLrel. 17, Created)
 DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
 DT 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
 DE Putative F420-dependent dehydrogenase.
 OS Rhodococcus erythropolis.
 OC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
 OC Corynebacterineae; Nocardiaceae; Rhodococcus.
 CX NCBI_TaxID=1833;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=HL PM-1;
 RX MEDLINE=21479405; PubMed=11595177;
 RA Walters D.M., Russ R., Knackmuss H.J., Ruvierre P.E.;
 RT "High-density sampling of a bacterial operon using mRNA differential
 RT display.";
 RL Gene 273:305-315(2001).
 DR EMBL: AF323606; AAK38097.1; -
 DR InterPro: IPR02103; Bac_luciferase.
 DR Pfam: PF00296; bac_luciferase; 1.
 SQ SEQUENCE 295 AA; 32923 MW; BDADAF6ECA39D215 CRC64;
 Query Match 15.3%; Score 68; DB 2; Length 295;
 Best Local Similarity 40.0%; Pred. No. 6.3;
 Matches 16; Conservative 7; Mismatches 13; Indels 4; Gaps 3;
 Qy 42 FKEIRSDN-WLASHLGLPPDSLLSYYPANYSDSK-IWRP 79
 Db 25 FAEKIGFDSLWMTDHVALPTRVETAYP--YTDDGKFLWDP 62

RESULT 16
 Q8GFF8
 ID Q8GFF8 PRELIMINARY; PRT; 295 AA.
 AC Q8GFF8;
 DT 01-MAR-2003 (TrEMBLrel. 23, Created)
 DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)

DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Hydride transferase 1 (Fragment).
 GN HTI.
 OS Rhodococcus opacus (Nocardia opaca).
 OC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
 OC Corynebacterineae; Nocardiaceae; Rhodococcus.
 CX NCBI_TaxID=37919;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=RB1;
 RA Heies G.S., Knackmuss H.-J.;
 RT "Highly Conserved Genes Encoding Ring Hydrogenation of Picric Acid and
 RT 2,4-Dinitrophenol.";
 RL Submitted (FEH-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AY027578; AAK29141.1; -
 DR GO: GO:0016740; P:transferase activity; IEA.
 DR InterPro: IPR002103; Bac_luciferase.
 DR Pfam: PF00296; bac_luciferase; 1.
 KW Transferase.
 FT NON TER 295
 SQ SEQUENCE 295 AA; 32923 MW; BDADAF6ECA39D215 CRC64;
 Query Match 15.3%; Score 68; DB 2; Length 295;
 Best Local Similarity 40.0%; Pred. No. 6.3;
 Matches 16; Conservative 7; Mismatches 13; Indels 4; Gaps 3;
 Qy 42 FKEIRSDN-WLASHLGLPPDSLLSYYPANYSDSK-IWRP 79
 Db 25 FAEKIGFDSLWMTDHVALPTRVETAYP--YTDDGKFLWDP 62

RESULT 17
 O59773
 ID O59773 PRELIMINARY; PRT; 985 AA.
 AC O59773;
 DT 01-AUG-1998 (TrEMBLrel. 07, Created)
 DT 01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
 DE Hypothetical protein.
 GN SPCC1795.08C.
 OS Schizosaccharomyces pombe (Fission yeast).
 OC Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
 OC Schizosaccharomycetales; Schizosaccharomycetaceae;
 OC Schizosaccharomycetes.
 CX NCBI_TaxID=4896;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=972h-;
 RA Lyne M., Rajandream M.A., Barrell B.G., Oliver K., Harris D.;
 RL Submitted (APR-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AL022598; CAAL8643.1; -
 DR PIR: T41135; T41135.
 DR GeneDB SPombe; SPCC1795.08C; -
 DR GO: GO:0005634; C:nucleus; IEA.
 DR GO: GO:0003677; F:nuclea binding; IEA.
 DR InterPro: IPR006562; HSA.
 DR InterPro: IPR001005; Myb_DNA_binding.
 DR SMART: SM00573; HSA; 1.
 DR SMART: SM00717; SANT; 1.
 DR PROSITE: PS0090; MYB 3; 1.
 KW Hypothetical protein.
 SQ SEQUENCE 985 AA; 112481 MW; BDBSD9374C83A947 CRC64;
 Query Match 15.3%; Score 68; DB 3; Length 985;
 Best Local Similarity 31.9%; Pred. No. 26;
 Matches 22; Conservative 5; Mismatches 20; Indels 22; Gaps 2;

Qy 27 DKCNACIGTSICK-----KPFKEIRSDNWLASHLGLPPDSLL 64
 Db 519 DKCTVCTPASISKKPKPYMQENHQDSHEETFEQIVSHFNNDNNNNKVLSPRSLQ 578
 Qy 65 SYPNYSDSK 73

579 FTVAFSD 587

Db

RESULT 18

Q8XB85 PRELIMINARY; PRT; 390 AA.

AC Q8XB85; 20; Conservative 18; Mismatches 19; Indels 25; Gaps 6;

DT 01-MAR-2002 (TREMELrel. 20, Last sequence update)

DT 01-MAR-2002 (TREMELrel. 20, Last sequence update)

DT 01-JUN-2003 (TREMELrel. 24, Last annotation update)

DE O-f, hypothetical protein.

DE YJIM OR Z5937 OR ECS298.

OS Escherichia coli O157:H7.

OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;

OC Enterobacteriaceae; Escherichia.

OX NCBI_TaxID=83334;

QY SEQUENCE FROM N.A.

RC STRAIN=O157:H7 / EDL933 / ATCC 700927;

RX MEDLINE=21074935; PubMed=11206551;

RA Perna N.T., Plunkett G. III, Burland V., Mau B., Glasner J.D.,

RA Rose D.J., Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A.,

RA Posfai G., Hackett J., Klink S., Boutin A., Shao Y., Miller L.,

RA Grobbeck E.J., Davis N.W., Lim A., Dimalanta E.T., Potamouis K.,

RA Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz D.C.,

RA Welch R.A., Blattner F.R.;

RT "Genome sequence of enterohaemorrhagic Escherichia coli O157:H7.;"

RL Nature 409:529-533(2001).

RN [2]

RP SEQUENCE FROM N.A.

RC STRAIN=O157:H7 / RIMD 0509952;

RX MEDLINE=21156231; PubMed=11258796;

RA Hayashi T., Makino K., Ohnishi M., Kurokawa K., Ishii K., Yokoyama K.,

RA Han C.-G., Ohtsubo E., Nakayama K., Murata T., Tanaka M., Tobe T.,

RA Iida T., Takami H., Honda T., Sasaki K., Ogasawara N., Yasunaga T.,

RA Kahara S., Shiba T., Hattori M., Shinagawa H.;

RT "Complete genome sequence of enterohemorrhagic Escherichia coli

RT O157:H7 and genomic comparison with a laboratory strain X-12.;"

RL DNA Res. 8:111-22(2001).

DR EMEL; AE005665; AAG59520.1; -

DR EMEL; AF002569; BAB38721.1; -

DR PIR; B91291; B91291.

DR PIR; D86132; D86132.

KW Complete proteome.

QY SEQUENCE 390 AA; 43599 MW; B54561646F69415B CRC64;

Query Match 15.2%; Score 67.5; DB 16; Length 390;

Best Local Similarity 24.4%; Pred. No. 10;

Matches 20; Conservative 18; Mismatches 19; Indels 25; Gaps 6;

QY 8 SLVPOVRTSYNFGRTFLGLDKC-----NACIGTSIC---KKFKKEIRSDNWLAHGL 58

Db 83 NLCPLIKSSYGFCKT-----DKCFYFSDLVVGTCTCGKKKWE-----YMAE---F 128

QY 59 PPSLLSYPNYSDSK--IWR 78

Db 129 KPVHVMQLENSVKDDASRALWK 150

RESULT 19

Q8FA92 PRELIMINARY; PRT; 390 AA.

AC Q8FA92; 20; Conservative 18; Mismatches 19; Indels 25; Gaps 6;

DT 01-MAR-2003 (TREMELrel. 23, Created)

DT 01-MAR-2003 (TREMELrel. 23, Last sequence update)

DT 01-MAR-2003 (TREMELrel. 23, Last annotation update)

DE Hypothetical protein YJIM.

DE YJIM OR C5418.

OS Escherichia coli O6.

OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;

OC Enterobacteriaceae; Escherichia.

OX NCBI_TaxID=217992;

QY SEQUENCE FROM N.A.

RC STRAIN=cv. Nipponbare;

RX STRAIN=cv. Nipponbare;

RA Sasaki T., Matsumoto T., Yamamoto K.;

RT "Oryza sativa nipponbare (GA3) genomic DNA, chromosome 1, PAC

RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.

DR EMEL; AF003380; BAB92564.1; -

DR Gramene; O8LIW4; -

DR InterPro; IPR003347; TF_JmjC.

DR InterPro; IPR003349; TF_JmjN.

DR InterPro; IPR007087; ZnF_C2H2.

DR Pfam; PF02373; JmjC; 1.

DR Pfam; PF02375; JmjN; 1.

DR Pfam; PF00096; zf-C2H2; 3.

DR SMART; SM00558; JmjC; 1.

DR SMART; SM00545; JmjN; 1.

DR SMART; SM00355; ZnF_C2H2; 4.

DR PROSITE; PS00028; ZINC_FINGER_C2H2_1; 3.

DR PROSITE; PS0157; ZINC_FINGER_C2H2_2; 3.

KW Metal-binding; Zinc; Zinc-finger.

QY SEQUENCE 1283 AA; 141875 MW; 04CFB7DB88CCDE0D CRC64;

Query Match 15.1%; Score 67; DB 10; Length 1283;

Best Local Similarity 39.0%; Pred. No. 47;

Matches 16; Conservative 4; Mismatches 21; Indels 0; Gaps 0;

QY 32 CIGTSICKKFKKEIRSDNWLAHGLPPDSLLSYPNYSD 72

Db 408 CREGOLVKQMFQNVIEDNELLHNDGSSCIIIPANAHD 448

QY NCBI_TaxID=217992;

RN [1]

```
RESULT 21
Q9ZA91 ID Q9ZA91 PRELIMINARY; PRT; 423 AA.
AC Q9ZA91
DT 01-MAY-1999 (TrEMBLrel. 10, Created)
DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE ImpB.
GN IMPB.
OS Shigella flexneri.
OG Shigella virulence.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Shigella.
OX NCBI_TaxID=623;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SA100;
RX MEDLINE=99150279; PubMed=10024589;
RA Ruyen-Jacecky L.J., Hong M., Payne S.M.;
RT "The virulence plasmid-encoded impCAB operon enhances survival and
RT induced mutagenesis in Shigella flexneri after exposure to UV
RT radiation."
RL Infect. Immun. 67:1415-1423(1999).
DR EM3L; AF073316; AAD03593.1; -.
DR GO; GO:0046821; C:extrachromosomal DNA; IEA.
DR GO; GO:0036281; P:DNA repair; IEA.
DR InterPro; IPR001126; UMC_like.
DR Pfam; PF00817; IMS; 1.
DR PROSITE; PS0173; UMC; 1.
KW Plasmid.
SQ SEQUENCE 423 AA; 47624 MW; 0259CA581C222AF8 CRC64;

Query Match 15.0%; Score 66.5; DB 2; Length 423;
Best Local Similarity 27.8%; Pred. No. 15;
Matches 20; Conservative 13; Mismatches 37; Indels 3; Gaps 2;

QY 6 LSSLVQVRSYNGRTFLGDKNCACIGTSICKKFKBEIRSDNWLASHLGLPPDSLLS 65
DB 88 LESLSAVE-PYSIDEMFIDRGINHICISPEFFGHQLEQVKSQVGLTGMVGAPTTLA 146
QY 66 YPANYSDSKIW 77
DB 147 KSAQWA--TKQW 156

RESULT 22
Q88AX3 ID Q88AX3 PRELIMINARY; PRT; 218 AA.
AC Q88AX3
DT 01-JUN-2003 (TrEMBLrel. 24, Created)
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Conserved hypothetical protein.
GN PSPT00260.
OS Pseudomonas syringae (pv. tomato).
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC Pseudomonadaceae; Pseudomonas.
OX NCBI_TaxID=323;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=DC3000;
RA Buell R., Joardar V., Khouri H., Fedorova N., Tran B., Russell D.,
RA Barry K., Uterback T., Van Aken S., Feldblyum T., Gwinn M.,
RA Dodson R., DeBoy R., Durkin A., Kolonay J., Madupu R., Daugherty S.,
RA Brinkac L., Beanan M., Haft D., Selengut J., Nelson W., Davidsen T.,
RA White O., Fraser C., Collier A.;
RT "Complete sequence of Pseudomonas syringae."
RL Submitted (MAR-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AE016856; AAO53806.1; -.
DR TIGR; PSPT00260; -.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 218 AA; 24762 MW; 21CAC4ED2730AE20 CRC64;

Query Match 14.9%; Score 66; DB 4; Length 421;
Best Local Similarity 32.7%; Pred. No. 17;
Matches 16; Conservative 6; Mismatches 23; Indels 4; Gaps 1;

QY 12 QVTSYNGRTFLGDKNCACIGTSICKKFKBEIRSDNWLASHLGLPP 60
DB 205 QEETTENIEKRTSLDSCQACMKISCCSHDLKKEVD----LLOHLQVSP 249

RESULT 23
Q8NA05 ID Q8NA05 PRELIMINARY; PRT; 421 AA.
AC Q8NA05
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE Hypothetical protein FLJ35981 (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Testis;
RA Suzuki O., Sasaki N., Aotsuka S., Shoji T., Ichihara T., Shiohata N.,
RA Matsumoto K., Hirano M., Sano S., Nomura R., Yoshikawa Y.,
RA Matsumura Y., Moriya S., Chiba E., Momiyama H., Onogawa S.,
RA Kaeriyama S., Satoh N., Matsunawa H., Takahashi E., Kataoka R.,
RA Kuga N., Kuroda A., Satoh I., Kamata K., Takami S., Terashima Y.,
RA Watanabe M., Sugiyama T., Irie R., Otsuki T., Sato H., Wakamatsu A.,
RA Ishii S., Yamamoto J., Isono Y., Kawai-Hio Y., Saito K., Nishikawa T.,
RA Kimura K., Yamaehita H., Matsuo K., Nakamura Y., Sekine M.,
RA Kikuchi H., Kanda K., Wagatsuma M., Murakawa K., Kanehori K.,
RA Takahashi-Fujii A., Oshima A., Sugiyama A., Kawakami B., Suzuki Y.,
RA Sugano S., Nagahari K., Masuho Y., Nagai K., Isogai T.;
RT "NEDO human cDNA sequencing project."
RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AK093300; BAC04126.1; -.
KW Hypothetical protein.
RN NON_TER 421
SQ SEQUENCE 421 AA; 48338 MW; AA778E049F6CD9FD CRC64;

Query Match 14.9%; Score 66; DB 4; Length 421;
Best Local Similarity 32.7%; Pred. No. 17;
Matches 16; Conservative 6; Mismatches 23; Indels 4; Gaps 1;

QY 12 QVTSYNGRTFLGDKNCACIGTSICKKFKBEIRSDNWLASHLGLPP 60
DB 205 QEETTENIEKRTSLDSCQACMKISCCSHDLKKEVD----LLOHLQVSP 249

RESULT 24
Q8EXB4 ID Q8EXB4 PRELIMINARY; PRT; 348 AA.
AC Q8EXB4
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Hypothetical protein.
GN S00181.
OS Shewanella oneidensis.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Alteromonadales;
OC Alteromonadaceae; Shewanella.
OX NCBI_TaxID=70863;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=MR-1;
RX MEDLINE=22297686; PubMed=12368813;
RA Heidelberg J.F., Paulsen I.T., Nelson K.E., Gaidos E.J., Nelson W.C.,
```

Read T.D., Eisen J.A., Seshadri R., Ward N., Methe B., Clayton R.A., Meyer T., Tsapin A., Scott J., Beanan M., Brinkac L., Daugherty S., DeBoy R.T., Dodson R.J., Durkin A.S., Haft D.H., Kolonay J.F., Madupu R., Peterson J.D., Umavam I.A., White O., Wolf A.M., Vamathevan J., Weidman J., Impraim M., Lee K., Berry K., Lee C., Mueller J., Khouri H., Gill J., Uterback T.R., McDonald L.A., Feldblum Y.V., Smith H.O., Venter J.C., Neilson K.H., Fraser C.M.; Nat. Biotechnol.

Query Match
Best Local Similarity
MATCHES 20; Conservative 7; Mismatches 22; Indels 11; Gaps 1;

Cy 1 LPASSLSLVDPQVNT-----SYNFGRTFLGLDKONACIGTSCKKFFKEIRSD 49
||||| :|||
96 LPAPNLSQLVEQVPAGFIHLRCGSTLVSSEFAGLSKRALSESPLLTQLVLDMILSD 155

Dd 96 LPAPNLSQLVEQVPAGFIHLRCGSTLVSSEFAGLSKRALSESPLLTQLVLDMILSD 155

RESULT 25

Q8Y842 PRELIMINARY; PRT; 572 AA.

ID Q8Y842 PRELIMINARY; PRT; 572 AA.
AC Q8Y842;
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DI 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DD 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)

Hypoethical protein ImcI076.

Gn IMC076.
OS Listeria monocytogenes.
OC Bacteria; Firmicutes; Bacillales;>Listeriaceae;Listeria.
OX NCBI_TaxID=1639;
RN [1]
RP SEQUENCE FROM N.A.
RZ STRAIN=EGD-e / Serovar 1/2a;
RX MEDLINE=21537279; PubMed=11679669;
RA Glaser P., Frangeul L., Buchrieser C., Rusniok C., Amend A., Baquero F., Berche P., Bloeker H., Brandt P., Chakraborty T., Charbit A., Chetouani F., Couve E., de Daruvar A., Denoux P., Domann E., Dominguez-Bernal G., Duchaud E., Durant L., Dessurget O., Entian K.-D., Fsihi H., Garcia-del Portillo F., Garrido P., Gautier L., Goebel W., Gomez-Lopez N., Hain T., Hauf J., Jackson D., Jones L.-M., Kaerst U., Kreft J., Kuhr M., Kunst F., Kurapat G., Madueno E., Maitournan A., Mata Vicente J., Ng E., Nedjari H., Nordisiek G., Novella S., de Pabloos B., Perez-Diaz J.-C., Purcell R., Rammel B., Rose M., Schluter T., Smoes N., Tierrez A., Vazquez-Boland J.-A., Voss H., Wehlend J., Cozzart P.; "Comparative genomics of Listeria species."; Science 294:849-852(2001).
RL EMBL: AL591977; CAJ99154.1 - ;
RR PTR: AD1209; AD1209 - ;
DR DR
DR Listlist; LM001076; --
DR GO:GO009288; C:Flagellum (sensu Bacteria); IEA.
DR GO:GO000400; F:amidase activity; IEA.
DR GO:GO0003774; F:motor activity; IEA.
DR GO:GO0001539; P:ciliary/flagellar motility; IEA.
DR GO:GO0009253; P:peptidoglycan catabolism; IEA.
DR InterPro:IPRO02901; Amidase_4.
DR InterPro:IPRO00423; Flag_FlgU.
DR Pfam:PF01832; Amidase 4; 1.
DR PRINTS; PR01002; FLGFLGJ.
DR SMART; SM00047; LY22; 1.
KW Hypoethetical protein; Complete proteome.
SQ SEQUENCE 572 AA; 64155 MW; 02167C72AD7F78B1 CRC64;

Query Match
Best Local Similarity
MATCHES 24; Conservative 11; Xismatches 31; Indels 29; Gaps 5;

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DR Pfam: PF00817; IMS; 1.
DR PROSITE: PS0173; UMC; 1.
SQ SEQUENCE 424 AA; 47958 MW; 537373D885FF30A2 CRC64;
  Query Match 14.5%; Score 64.5; DB 2; Length 424;
  Best Local Similarity 27.5%; Pred. No. 26;
  Matches 19; Conservative 13; Mismatches 34; Indels 3; Gaps 2;
QY 9 LVPQVTSYNGRTFLGLDKCNACIGTSICKKFKKEIRSDNMLASHLGLPPDSLLSYPA 68
  : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 91 LAEVVE-QYSDIMELDIRGSDICDFEGRQLRHRVSGTGLTGVGMPKTKLAKSA 149
  : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 69 NYSDDSKIW 77
  : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 150 QWA--SKEW 156
  : : : : : : : : : : : : : : : : : : : : : : : : : : : :
RESULT 28
Q7XTO7 PRELIMINARY; PRT; 637 AA.
AC Q7XTO7;
DT 01-OCT-2003 (TrEMBLrel. 25, Created)
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DE OSJNB0079B02.6 protein.
DE OSJNB0079B02.6
GN OSJNB0079B02.6
OS Oryza sativa (Rice).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC Ehrhartoideae; Oryzaceae; Oryza.
NCBI_TaxID=4530;
RN [1]_
R2 SEQUENCE FROM N.A.
RA Han B., Feng Q., Huang Y.C., Li Y., Zhu J.J., Zhao Q., Hu X.,
RA Liu Y.L., Mu J., Yu Z., Chen L., Fan D.L., Weng Q.J., Zhang L.,
RA Lu Y.Q., Yu S.L., Liu X.H., Lu T.T., Zhang Y.J., Lu Y., Li C., Li T.,
RA Zhang Y., Hu H., Jia P.X., Qian Y.M., Ying K., Zhou B., Chen S.H.,
RA Hao P., Zhang L., Wu M., Zhang R.Q., Guan J.P., Fu G., Wang S.Y.,
RA Ren S.X., Lv G., Lin W., Gu W.Q., Zhu G.F., Tu Y.F., Jia J., Yin H.F.,
RA Zhang Y., Cai Z., Chen J., Kang H., Chen X.Y., Shao C.Y., Sun Y.,
RA Hu Q.P., Zhang X.L., Zhang W., Wang L.J., Ding C.W., Sheng H.H.,
RA Gu J.L., Chen S.T., Ni L., Zhu F.H., Hong G.F.;
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: AL606455; CAD41847.1; --
SQ SEQUENCE 637 AA; 67001 MW; EC348B0153CA388A CRC64;
  Query Match 14.5%; Score 64.5; DB 10; Length 637;
  Best Local Similarity 32.9%; Pred. No. 42;
  Matches 24; Conservative 7; Mismatches 23; Indels 19; Gaps 3;
QY 7 SSVLPQVTSYNGRTFLGLDKCNACIGTS----ICKKFKKEIRS-----DNWLASHLGL 58
  : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 18 ASPPFQVATSMNF-----TCLGSKTSTSKMFKQSDQSLSPDGDGCRVLVLGL 66
  : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 59 PPSLLSYPNYS 71
  : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 67 GTPNLHYADNES 79
  : : : : : : : : : : : : : : : : : : : : : : : : : : : :
RESULT 29
Q8CMR9 PRELIMINARY; PRT; 1498 AA.
AC Q8CMR9;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Glutamate synthase large subunit.
GN SE2312.
OS Staphylococcus epidermidis.
OC Bacteria; Firmicutes; Bacillales; Staphylococcus.
NCBI_TaxID=1282;
RN [1]_
R2 SEQUENCE FROM N.A.
RA Kapral V., Anderson I., Ivanova N., Reznik G., Los T., Lykidis A.,
RA Bhattacharya A., Bartman A., Gardner W., Grechkin G., Zhu L.,
RA Vasileva O., Chu L., Kogan Y., Chaga O., Goltzman E., Bernal A.,
RA Larsen N., D'Souza M., Walunas T., Pusch G., Haselkorn R.,
RA Fongstein M., Kyridides N., Overbeek R.;
RT "Genome sequence and analysis of the oral bacterium Fusobacterium
RT nucleatum strain ATCC 25586.";
RL J. Bacteriol. 184:2005-2018 (2002).
DR EMBL: AB010501; AAL94081.1; --
DR GO: GO:000415; F:acetyltransferase activity; IEA.
DR GO: GO:0004343; F:glucosamine 6-phosphate N-acetyltransferase. . .; IEA.
DR GO: GO:0016740; F:transferase activity; IEA.
DR GO: GO:0003977; F:UDP-N-acetylglucosamine diphosphorylase act. . .; IEA.
DR GO: GO:0009058; P:biosynthesis; IEA.
DR GO: GO:0009103; P:lipopolysaccharide biosynthesis; IEA.
DR InterPro: IPR005882; GlmU.
DR InterPro: IPR001451; Hexapep transf.
DR InterPro: IPR005835; NTP transferase.
DR Pfam: PF00132; hexapep; 7.
DR Pfam: PF00483; NTP transferase; 1.
DR TIGRFAMs: TIGR01173; glmU; 1.
DR PROSITE: PS00101; HEXAPEP TRANSFERASES; 1.
KW Transferase; Acyltransferase; Complete proteome.
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SQ SEQUENCE 446 AA; 49314 MW; 42097CA2626A3983 CRC64;
 Query Match 14.4%; Score 64; DB 16; Length 446;
 Best Local Similarity 34.9%; Pred. No. 32;
 Matches 22; Conservative 7; Mismatches 20; Indels 14; Gaps 3;
 QY 22 TELG---LDKCNACIGTISIC---KKFKKEIRSDNWLASHLGLPPDSLLSYPPANYSD 73
 Db 360 TYLGDAHIGEXTNIGAGTITCNVDGKNKFKTEIGKDVFIGS-----DTMLVAPVNIGDN 413
 QY 74 SKI 76
 Db 414 SLI 416

Search completed: June 14, 2004, 07:59:42
 Job time : 22.9245 secs

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OM protein - protein search, using sw model

Run on: June 14, 2004, 08:05:41 ; Search time 23 Seconds
(without alignments)
408.519 Million cell updates/sec

Title: US-10-054-988-114
Perfect score: 182
Sequence: 1 MEPQGPAAALPCWIAL.....DLVQCHQGRKELFLCMLR 182

Scoring table: OL180

Gapop 60.0 , Gapext 60.0

Searched: 389414 segs, 51625971 residues

Word size : 0

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database : Issued Patents AA:*

1: /cgn2_6/ptodata/2/iaa/5A COMB pep: *
2: /cgn2_6/ptodata/2/iaa/5B COMB pep: *
3: /cgn2_6/ptodata/2/iaa/6A COMB pep: *
4: /cgn2_6/ptodata/2/iaa/6B COMB pep: *
5: /cgn2_6/ptodata/2/iaa/PTUS COMB pep: *
6: /cgn2_6/ptodata/2/iaa/backfiles1.pcp: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	182	100.0	182	4	US-09-904-615-114
2	182	100.0	209	4	US-09-904-615-168
3	88	48.4	146	4	US-09-489-847-161
4	88	48.4	146	4	US-09-904-615-121
5	88	48.4	146	4	US-09-904-615-169
6	75	41.2	79	4	US-09-904-615-167
7	75	41.2	80	4	US-09-904-615-120
8	7	3.8	25	3	US-09-049-691-57
9	7	3.8	25	3	US-09-049-691-59
10	7	3.8	25	3	US-09-049-691-62
11	7	3.8	25	3	US-09-049-691-63
12	7	3.8	84	4	US-09-663-600A-204
13	7	3.8	85	4	US-09-716-129-63
14	7	3.8	86	4	US-09-663-600A-111
15	7	3.8	97	4	US-09-663-600A-110
16	7	3.8	182	4	US-09-663-600A-205
17	7	3.8	195	4	US-09-252-991A-21779
18	7	3.8	219	1	US-08-470-261-2
19	7	3.8	219	3	US-08-916-989B-2
20	7	3.8	219	4	US-09-432-253-2
21	7	3.8	219	4	US-09-974-800-2
22	7	3.8	219	5	PCT-US94-13187-2
23	7	3.8	311	4	US-09-252-991A-18075
24	7	3.8	344	1	US-08-400-422-4
25	7	3.8	353	1	US-08-034-650-11
26	7	3.8	353	1	US-08-449-015-11
27	7	3.8	409	4	US-09-252-991A-18707
					Sequence 114, App
					Sequence 168, App
					Sequence 161, App
					Sequence 121, App
					Sequence 169, App
					Sequence 167, App
					Sequence 120, App
					Sequence 57, Appl
					Sequence 59, Appl
					Sequence 62, Appl
					Sequence 204, App
					Sequence 63, Appl
					Sequence 111, App
					Sequence 110, App
					Sequence 205, App
					Sequence 21779, A
					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 2, Appli
					Sequence 18075, A
					Sequence 4, Appli
					Sequence 11, Appl
					Sequence 11, Appl
					Sequence 18707, A

28	7	3.8	469	4	US-09-252-991A-25438	Sequence 25438, A
29	7	3.8	556	4	US-09-252-991A-22670	Sequence 22670, A
30	7	3.8	693	2	US-08-380-403A-2	Sequence 2, Appli
31	7	3.8	693	2	US-08-380-403A-5	Sequence 5, Appli
32	7	3.8	693	2	US-08-895-628-2	Sequence 2, Appli
33	7	3.8	693	2	US-08-895-628-5	Sequence 5, Appli
34	7	3.8	693	4	US-08-895-810D-2	Sequence 2, Appli
35	7	3.8	693	4	US-08-895-810D-5	Sequence 5, Appli
36	7	3.8	705	4	US-09-252-991A-28353	Sequence 28353, A
37	7	3.8	716	1	US-08-396-479B-4	Sequence 4, Appli
38	7	3.8	716	1	US-08-818-823-4	Sequence 4, Appli
39	7	3.8	716	3	US-09-037-190-38	Sequence 38, Appl
40	7	3.8	716	3	US-09-037-190-46	Sequence 46, Appl
41	7	3.8	716	3	US-09-037-192-38	Sequence 38, Appl
42	7	3.8	716	3	US-09-037-192-46	Sequence 46, Appl
43	7	3.8	716	3	US-09-037-143-38	Sequence 38, Appl
44	7	3.8	716	3	US-09-037-143-46	Sequence 46, Appl
45	7	3.8	716	3	US-09-049-691-38	Sequence 38, Appl
46	7	3.8	716	3	US-09-049-691-46	Sequence 46, Appl
47	7	3.8	716	3	US-08-260-174-38	Sequence 38, Appl
48	7	3.8	716	3	US-08-260-174-46	Sequence 46, Appl
49	7	3.8	716	4	US-09-338-128A-38	Sequence 38, Appl
50	7	3.8	716	4	US-09-338-128A-46	Sequence 46, Appl
51	7	3.8	716	4	US-09-232-346-38	Sequence 38, Appl
52	7	3.8	716	4	US-09-232-346-46	Sequence 46, Appl
53	7	3.8	716	4	US-09-037-192-38	Sequence 38, Appl
54	7	3.8	716	4	US-09-037-192-46	Sequence 46, Appl
55	7	3.8	716	5	PCT-US94-07237-37	Sequence 37, Appl
56	7	3.8	761	2	US-08-124-981A-2	Sequence 2, Appli
57	7	3.8	789	3	US-08-727-308-1	Sequence 1, Appli
58	7	3.8	1073	4	US-09-252-991A-27341	Sequence 27341, A
59	6	3.3	8	2	US-08-747-137-18	Sequence 18, Appl
60	6	3.3	10	4	US-09-498-134A-8	Sequence 8, Appli
61	6	3.3	12	4	US-09-402-401C-45	Sequence 45, Appl
62	6	3.3	15	1	US-08-030-077-8	Sequence 8, Appli
63	6	3.3	15	4	US-08-218-369-1	Sequence 1, Appli
64	6	3.3	15	4	US-09-904-599A-1	Sequence 1, Appli
65	6	3.3	15	5	PCT-US95-03742-1	Sequence 1, Appli
66	6	3.3	18	1	US-07-982-744B-6	Sequence 6, Appli
67	6	3.3	18	2	US-08-224-591-6	Sequence 6, Appli
68	6	3.3	18	2	US-08-926-789-6	Sequence 6, Appli
69	6	3.3	18	5	PCT-US93-11138-6	Sequence 6, Appli
70	6	3.3	20	4	US-09-301-593-60	Sequence 60, Appl
71	6	3.3	21	1	US-08-447-411-35	Sequence 35, Appl
72	6	3.3	21	2	US-07-982-743-17	Sequence 17, Appl
73	6	3.3	21	2	US-09-135-002-17	Sequence 17, Appl
74	6	3.3	21	3	US-09-128-155-12	Sequence 12, Appl
75	6	3.3	21	3	US-09-414-005-17	Sequence 17, Appl
76	6	3.3	21	4	US-09-645-436-17	Sequence 17, Appl
77	6	3.3	21	4	US-09-205-258-1062	Sequence 1062, Ap
78	6	3.3	24	4	US-09-523-656-32	Sequence 32, Appl
79	6	3.3	28	2	US-08-633-879C-6	Sequence 6, Appli
80	6	3.3	42	1	US-08-664-596B-15	Sequence 15, Appl
81	6	3.3	52	3	US-09-128-155-8	Sequence 8, Appli
82	6	3.3	54	2	US-08-691-814B-42	Sequence 42, Appl
83	6	3.3	54	4	US-09-621-976-5389	Sequence 5389, Ap
84	6	3.3	54	4	US-09-621-976-5390	Sequence 5390, Ap
85	6	3.3	60	2	US-08-598-873-59	Sequence 59, Appl
86	6	3.3	60	3	US-09-036-315-24	Sequence 24, Appl
87	6	3.3	60	3	US-08-605-430-59	Sequence 59, Appl
88	6	3.3	63	3	US-09-328-352-5980	Sequence 5980, Ap
89	6	3.3	63	3	US-09-128-155-4	Sequence 4, Appli
90	6	3.3	63	4	US-09-543-681A-5842	Sequence 5842, Ap
91	6	3.3	67	4	US-09-180-167A-10	Sequence 10, Appl
92	6	3.3	67	4	US-09-180-167A-11	Sequence 11, Appl
93	6	3.3	67	4	US-09-033-524B-10	Sequence 10, Appl
94	6	3.3	67	4	US-09-033-524B-11	Sequence 11, Appl
95	6	3.3	68	4	US-09-489-039A-8413	Sequence 8413, Ap
96	6	3.3	72	4	US-09-621-976-5494	Sequence 5494, Ap
97	6	3.3	76	1	US-08-264-022-1	Sequence 1, Appli
98	6	3.3	77	3	US-09-246-500B-1	Sequence 1, Appli
99	6	3.3	77	3	US-09-252-991A-26455	Sequence 26455, A
100	6	3.3	77	4	US-09-708-606-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1

US-09-904-615-114
; Sequence 114, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-114

Query Match 100.0%; Score 182; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 6.9e-168;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MEPOLGPEAAALRPGMLALLWVSALSCSFSLPSSLSLSPVQVTSYNGRTFLGLDKC	60
Db	1	MEPOLGPEAAALRPGMLALLWVSALSCSFSLPSSLSLSPVQVTSYNGRTFLGLDKC	60
QY	61	NACIGTSICKKFFKEEIRSDNWLASHGLPDPDSLLSYPNYSDSKTIWRPVEIFRLVSKY	120
Db	61	NACIGTSICKKFFKEEIRSDNWLASHGLPDPDSLLSYPNYSDSKTIWRPVEIFRLVSKY	120
QY	121	ONEISDRKICASAPKTCISIERVLKTERFQKWLQAKRLTPDLVQDCHQOQRELKFLCM	180
Db	121	ONEISDRKICASAPKTCISIERVLKTERFQKWLQAKRLTPDLVQDCHQOQRELKFLCM	180
QY	181	LR 182	
Db	181	LR 182	

RESULT 2

US-09-904-615-168
; Sequence 168, Application US/09904615
; Patent No. 6566325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-168

Query Match 100.0%; Score 182; DB 4; Length 209;
Best Local Similarity 100.0%; Pred. No. 7.8e-168;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MEPOLGPEAAALRPGMLALLWVSALSCSFSLPSSLSLSPVQVTSYNGRTFLGLDKC	60
Db	28	MEPOLGPEAAALRPGMLALLWVSALSCSFSLPSSLSLSPVQVTSYNGRTFLGLDKC	87
QY	61	NACIGTSICKKFFKEEIRSDNWLASHGLPDPDSLLSYPNYSDSKTIWRPVEIFRLVSKY	120
Db	88	NACIGTSICKKFFKEEIRSDNWLASHGLPDPDSLLSYPNYSDSKTIWRPVEIFRLVSKY	147
QY	121	ONEISDRKICASAPKTCISIERVLKTERFQKWLQAKRLTPDLVQDCHQOQRELKFLCM	180
Db	148	ONEISDRKICASAPKTCISIERVLKTERFQKWLQAKRLTPDLVQDCHQOQRELKFLCM	207
QY	181	LR 182	
Db	208	LR 209	

RESULT 3

US-09-489-847-161
; Sequence 161, Application US/09489847
; Patent No. 8476195
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 98 Human Secreted Proteins
; FILE REFERENCE: P2031P1
; CURRENT APPLICATION NUMBER: US/09/489,847
; CURRENT FILING DATE: 2000-01-24
; EARLIER APPLICATION NUMBER: PCT/US99/17130
; EARLIER FILING DATE: 1999-07-29
; EARLIER APPLICATION NUMBER: 60/094,657
; EARLIER FILING DATE: 1998-07-30
; EARLIER APPLICATION NUMBER: 60/095,486
; EARLIER FILING DATE: 1998-08-05
; EARLIER APPLICATION NUMBER: 60/096,319
; EARLIER FILING DATE: 1998-08-12
; EARLIER APPLICATION NUMBER: 60/095,454
; EARLIER FILING DATE: 1998-08-06
; EARLIER APPLICATION NUMBER: 60/095,455
; EARLIER FILING DATE: 1998-08-06
; NUMBER OF SEQ ID NOS: 376
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 161
; LENGTH: 146
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (96)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (111)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (115)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (122)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (132)

OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-489-847-161

Query Match 48.4%; Score 88; DB 4; Length 146;
Best Local Similarity 100.0%; Pred. No. 2.9e-77;
Matches 88; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVLPQVTSYNGRTFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVLPQVTSYNGRTFLGLDKC 60
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLG 88
Db 61 NACIGTSICKKFFKEIRSDNWLASHLG 88

RESULT 4
US-09-904-615-121
Sequence 121, Application US/09904615
Patent No. 6566325
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 49 Human Secreted Proteins
FILE REFERENCE: P2032P1
CURRENT APPLICATION NUMBER: US/09/904,615
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: 09/511,554
PRIOR FILING DATE: 2000-02-23
PRIOR APPLICATION NUMBER: 60/097,917
PRIOR FILING DATE: 1998-08-25
PRIOR APPLICATION NUMBER: 60/098,634
PRIOR FILING DATE: 1998-08-31
NUMBER OF SEQ ID NOS: 170
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 121
LENGTH: 146
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (96)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (107)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (111)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (115)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (132)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids

US-09-904-615-121
Sequence 121, Application US/09904615
Patent No. 6566325
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 49 Human Secreted Proteins
FILE REFERENCE: P2032P1
CURRENT APPLICATION NUMBER: US/09/904,615
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: 09/511,554
PRIOR FILING DATE: 2000-02-23
PRIOR APPLICATION NUMBER: 60/097,917
PRIOR FILING DATE: 1998-08-25
PRIOR APPLICATION NUMBER: 60/098,634
PRIOR FILING DATE: 1998-08-31
NUMBER OF SEQ ID NOS: 170
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 121
LENGTH: 146
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (96)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (107)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (111)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (115)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (122)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (132)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-904-615-121
Query Match 48.4%; Score 88; DB 4; Length 146;
Best Local Similarity 100.0%; Pred. No. 2.9e-77;
Matches 88; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVLPQVTSYNGRTFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVLPQVTSYNGRTFLGLDKC 60
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLG 88
Db 61 NACIGTSICKKFFKEIRSDNWLASHLG 88

RESULT 5

US-09-904-615-169
Sequence 169, Application US/09904615
Patent No. 6566325
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 49 Human Secreted Proteins
FILE REFERENCE: P2032P1
CURRENT APPLICATION NUMBER: US/09/904,615
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: 09/511,554
PRIOR FILING DATE: 2000-02-23
PRIOR APPLICATION NUMBER: 60/097,917
PRIOR FILING DATE: 1998-08-25
PRIOR APPLICATION NUMBER: 60/098,634
PRIOR FILING DATE: 1998-08-31
NUMBER OF SEQ ID NOS: 170
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 169
LENGTH: 146
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (96)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (107)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (111)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (115)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (122)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (132)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-904-615-169
Query Match 48.4%; Score 88; DB 4; Length 146;
Best Local Similarity 100.0%; Pred. No. 2.9e-77;
Matches 88; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVLPQVTSYNGRTFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLLALLWVSALSCFSLPASSLSLVLPQVTSYNGRTFLGLDKC 60
Qy 61 NACIGTSICKKFFKEIRSDNWLASHLG 88
Db 61 NACIGTSICKKFFKEIRSDNWLASHLG 88

RESULT 6
US-09-904-615-167
Sequence 167, Application US/09904615
Patent No. 6566325
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 49 Human Secreted Proteins
FILE REFERENCE: P2032P1
CURRENT APPLICATION NUMBER: US/09/904,615
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: 09/511,554
PRIOR FILING DATE: 2000-02-23
PRIOR APPLICATION NUMBER: 60/097,917
PRIOR FILING DATE: 1998-08-25
PRIOR APPLICATION NUMBER: 60/098,634
PRIOR FILING DATE: 1998-08-31
NUMBER OF SEQ ID NOS: 170
SOFTWARE: PatentIn Ver. 2.0

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; SEQ ID NO 167
; LENGTH: 79
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-167

Query Match      41.2%; Score 75; DB 4; Length 79;
Best Local Similarity 100.0%; Pred. No. 5.7e-65;
Matches 75; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKE 75
Db 61 NACIGTSICKFFKE 75

RESULT 7
US-09-904-615-120
; Sequence 120, Application US/09904615
; Patent No. 6568325
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; CURRENT APPLICATION NUMBER: US/09/904,615
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 120
; LENGTH: 80
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (80)
; OTHER INFORMATION: Xaa equals stop translation
US-09-904-615-120

Query Match      41.2%; Score 75; DB 4; Length 80;
Best Local Similarity 100.0%; Pred. No. 5.7e-65;
Matches 75; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWALLLWVSALSCFSLPASSLSLVLPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKE 75
Db 61 NACIGTSICKFFKE 75

RESULT 8
US-09-049-691-57
; Sequence 57, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
```

```
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-049-691-57

Query Match      3.8%; Score 7; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 8.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLS 39
Db 4 PASSLS 10

RESULT 9
US-09-049-691-59
; Sequence 59, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
```

;; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 59:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-049-691-59

Query Match 3.8%; Score 7; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 8.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 4 PASSLSS 10

RESULT 10
US-09-049-691-62
; Sequence 62, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 62:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear

;; MOLECULE TYPE: peptide
US-09-049-691-62

Query Match 3.8%; Score 7; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 8.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 4 PASSLSS 10

RESULT 11
US-09-049-691-63
; Sequence 63, Application US/09049691
; Patent No. 6171781
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781throp, Jeffrey P.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 63:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-049-691-63

Query Match 3.8%; Score 7; DB 3; Length 25;
Best Local Similarity 100.0%; Pred. No. 8.1;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 4 PASSLSS 10

RESULT 12
US-09-663-600A-204
; Sequence 204, Application US/09663600A
; Patent No. 6573068

GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, Jean-Baptiste
APPLICANT: Duclert, Aymeric
APPLICANT: Bougueleret, Lydie
TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
FILE REFERENCE: 31.US3.CIP
CURRENT APPLICATION NUMBER: US/09/663,600A
CURRENT FILING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: 60/191,997
PRIOR FILING DATE: 1998-11-13
PRIOR APPLICATION NUMBER: 60/066,677
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/069,957
PRIOR FILING DATE: 1997-12-17
PRIOR APPLICATION NUMBER: 60/074,121
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: 60/081,563
PRIOR FILING DATE: 1998-04-13
PRIOR APPLICATION NUMBER: 60/096,116
PRIOR FILING DATE: 1998-08-10
PRIOR APPLICATION NUMBER: 60/099,273
PRIOR FILING DATE: 1998-09-04
NUMBER OF SEQ ID NOS: 229
SOFTWARE: Patent.pm
SEQ ID NO 204
LENGTH: 84
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
LOCATION: -20...-1
US-09-663-600A-204

Query Match 3.8%; Score 7; DB 4; Length 84;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 5 GWLALLL 11

RESULT 13
US-09-716-129-63
Sequence 63, Application US/09716129
Patent No. 6632920
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 36 Human Secreted Proteins
FILE REFERENCE: P2025PI
CURRENT APPLICATION NUMBER: US/09/716,129
CURRENT FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: 60/076,053
PRIOR FILING DATE: 1998-02-26
PRIOR APPLICATION NUMBER: 60/076,057
PRIOR FILING DATE: 1998-02-26
PRIOR APPLICATION NUMBER: 60/076,052
PRIOR FILING DATE: 1998-02-26
PRIOR APPLICATION NUMBER: 60/076,054
PRIOR FILING DATE: 1998-02-26
PRIOR APPLICATION NUMBER: 60/076,051
PRIOR FILING DATE: 1998-02-26
NUMBER OF SEQ ID NOS: 186
SOFTWARE: Patent In Ver. 2.3
SEQ ID NO 63
LENGTH: 85
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: 195)
OTHER INFORMATION: Xaa equals stop translation
US-09-716-129-63

Query Match 3.8%; Score 7; DB 4; Length 85;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 5 GWLALLL 11

RESULT 14
US-09-663-600A-111
Sequence 111, Application US/09663600A
Patent No. 6573068
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, Jean-Baptiste
APPLICANT: Duclert, Aymeric
APPLICANT: Bougueleret, Lydie
TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
FILE REFERENCE: 31.US3.CIP
CURRENT APPLICATION NUMBER: US/09/663,600A
CURRENT FILING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: 60/191,997
PRIOR FILING DATE: 1998-11-13
PRIOR APPLICATION NUMBER: 60/066,677
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/069,957
PRIOR FILING DATE: 1997-12-17
PRIOR APPLICATION NUMBER: 60/074,121
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: 60/081,563
PRIOR FILING DATE: 1998-04-13
PRIOR APPLICATION NUMBER: 60/096,116
PRIOR FILING DATE: 1998-08-10
PRIOR APPLICATION NUMBER: 60/099,273
PRIOR FILING DATE: 1998-09-04
NUMBER OF SEQ ID NOS: 229
SOFTWARE: Patent.pm
SEQ ID NO 111
LENGTH: 86
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
LOCATION: -20...-1
US-09-663-600A-111

Query Match 3.8%; Score 7; DB 4; Length 86;
Best Local Similarity 100.0%; Pred. No. 26;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 5 GWLALLL 11

RESULT 15
US-09-663-600A-110
Sequence 110, Application US/09663600A
Patent No. 6573068
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, Jean-Baptiste
APPLICANT: Duclert, Aymeric
APPLICANT: Bougueleret, Lydie
TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
FILE REFERENCE: 31.US3.CIP
CURRENT APPLICATION NUMBER: US/09/663,600A
CURRENT FILING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: 60/191,997
PRIOR FILING DATE: 1998-11-13
PRIOR APPLICATION NUMBER: 60/066,677
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/069,957

;; PRIOR FILING DATE: 1997-12-17
;; PRIOR APPLICATION NUMBER: 60/074,121
;; PRIOR FILING DATE: 1998-02-09
;; PRIOR APPLICATION NUMBER: 60/081,563
;; PRIOR FILING DATE: 1998-04-13
;; PRIOR APPLICATION NUMBER: 60/096,116
;; PRIOR FILING DATE: 1998-08-10
;; PRIOR APPLICATION NUMBER: 60/099,273
;; PRIOR FILING DATE: 1998-09-04
;; NUMBER OF SEQ ID NOS: 229
;; SOFTWARE: Patent.pm
;; SEQ ID NO 110
;; LENGTH: 97
;; TYPE: PRT
;; ORGANISM: Homo sapiens
;; FEATURE:
;; NAME/KEY: SIGNAL
;; LOCATION: -20...-1
;; NAME/KEY: UNSURE
;; LOCATION: 53
;; OTHER INFORMATION: Xaa = any one of the twenty amino acids
US-09-663-600A-110

Query Match 3.8%; Score 7; DB 4; Length 97;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 5 GWLALLL 11

RESULT 16
US-09-663-600A-205
;; Sequence 205, Application US/09663600A
;; Patent No. 6573068
;; GENERAL INFORMATION:
;; APPLICANT: Dumas Milne Edwards, Jean-Baptiste
;; APPLICANT: Duclert, Aymeric
;; APPLICANT: Bouguerelet, Lydie
;; TITLE OF INVENTION: EXTENDED CDNAS FOR SECRETED PROTEINS
;; FILE REFERENCE: 31.US3.CIP
;; CURRENT APPLICATION NUMBER: US/09/663,600A
;; CURRENT FILING DATE: 2000-09-15
;; PRIOR APPLICATION NUMBER: 09/191,997
;; PRIOR FILING DATE: 1998-11-13
;; PRIOR APPLICATION NUMBER: 60/066,677
;; PRIOR FILING DATE: 1997-11-13
;; PRIOR APPLICATION NUMBER: 60/069,957
;; PRIOR FILING DATE: 1997-12-17
;; PRIOR APPLICATION NUMBER: 60/074,121
;; PRIOR FILING DATE: 1998-02-09
;; PRIOR APPLICATION NUMBER: 60/081,563
;; PRIOR FILING DATE: 1998-04-13
;; PRIOR APPLICATION NUMBER: 60/096,116
;; PRIOR FILING DATE: 1998-08-10
;; PRIOR APPLICATION NUMBER: 60/099,273
;; PRIOR FILING DATE: 1998-09-04
;; NUMBER OF SEQ ID NOS: 229
;; SOFTWARE: Patent.pm
;; SEQ ID NO 205
;; LENGTH: 182
;; TYPE: PRT
;; ORGANISM: Homo sapiens
;; FEATURE:
;; NAME/KEY: SIGNAL
;; LOCATION: -20...-1
US-09-663-600A-205

Query Match 3.8%; Score 7; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 51;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 5 GWLALLL 11

RESULT 17
US-09-252-991A-21779
;; Sequence 21779, Application US/09252991A
;; Patent No. 6551795
;; GENERAL INFORMATION:
;; APPLICANT: Marc J. Rubenfield et al.
;; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
;; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
;; FILE REFERENCE: 107196.136
;; CURRENT APPLICATION NUMBER: US/09/252,991A
;; CURRENT FILING DATE: 1999-02-18
;; PRIOR APPLICATION NUMBER: US 60/374,788
;; PRIOR FILING DATE: 1998-02-18
;; PRIOR APPLICATION NUMBER: US 60/094,190
;; PRIOR FILING DATE: 1998-07-27
;; NUMBER OF SEQ ID NOS: 33142
;; SEQ ID NO 21779
;; LENGTH: 195
;; TYPE: PRT
;; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-21779

Query Match 3.8%; Score 7; DB 4; Length 195;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 9 AAALRPG 15
DB 58 AAALRPG 64

RESULT 18
US-08-470-261-2
;; Sequence 2, Application US/08470261
;; Patent No. 5695980
;; GENERAL INFORMATION:
;; APPLICANT: WEI, ET AL.
;; TITLE OF INVENTION: Human MutT2
;; NUMBER OF SEQUENCES: 8
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: CARELIA, BYRNE, BAIN, GILFILLAN,
;; STREET: 6 BECKER FARM ROAD
;; CITY: ROSELAND
;; STATE: NEW JERSEY
;; COUNTRY: USA
;; ZIP: 07068
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: 3.5 INCH DISKETTE
;; COMPUTER: IBM PS/2
;; OPERATING SYSTEM: MS-DOS
;; SOFTWARE: WORD PERFECT 5.1
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/470,261
;; FILING DATE: June 6, 1995
;; CLASSIFICATION: 435
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: PCT/US94/13187
;; FILING DATE: 15 NOV 1994
;; ATTORNEY/AGENT INFORMATION:
;; NAME: FERRARO, GREGORY D.
;; REGISTRATION NUMBER: 36,134
;; REFERENCE/DOCKET NUMBER: 325800-372
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 201-994-1700
;; TELEFAX: 201-994-1744
;; INFORMATION FOR SEQ ID NO: 2:
;; SEQUENCE CHARACTERISTICS:

LENGTH: 219 AMINO ACIDS
 TYPE: AMINO ACID
 STRANDEDNESS:
 TOPOLOGY: LINEAR
 MOLECULE TYPE: PROTEIN
 US-08-470-261-2

Query Match 3.8%; Score 7; DB 1; Length 219;
 Best Local Similarity 100.0%; Pred. No. 61;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAALR 13
 DB 105 PEAALR 111

RESULT 19

US-08-916-989B-2

Sequence 2, Application US/08916989B
 Patent No. 6103871
 GENERAL INFORMATION:
 APPLICANT: Wei, Ying-Pei
 APPLICANT: Kirkness, Ewen F.
 TITLE OF INVENTION: Human MutT2
 NUMBER OF SEQUENCES: 10
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Human Genome Sciences, Inc.
 STREET: 9410 Key West Avenue
 CITY: Rockville
 STATE: MD
 COUNTRY: USA
 ZIP: 20850

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/916,989B
 FILING DATE: 21-AUG-1997
 CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:
 NAME: Wales, Michele M.
 REGISTRATION NUMBER: 43,975
 REFERENCE/DOCKET NUMBER: PF144D1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 301-309-8504
 TELEFAX: 301-309-8439
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 219 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-916-989B-2

Query Match 3.8%; Score 7; DB 3; Length 219;
 Best Local Similarity 100.0%; Pred. No. 61;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAALR 13
 DB 105 PEAALR 111

RESULT 20

US-09-432-253-2

Sequence 2, Application US/09432253
 Patent No. 6344547
 GENERAL INFORMATION:
 APPLICANT: Wei, Ying-Pei
 APPLICANT: Kirkness, Ewen F.
 TITLE OF INVENTION: Human MutT2

NUMBER OF SEQUENCES: 10
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Human Genome Sciences, Inc.
 STREET: 9410 Key West Avenue
 CITY: Rockville
 STATE: MD
 COUNTRY: USA
 ZIP: 20850
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/432,253
 FILING DATE:
 CLASSIFICATION:

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/916,989
 FILING DATE:

ATTORNEY/AGENT INFORMATION:
 NAME: Wales, Michele M.
 REGISTRATION NUMBER: 43,975
 REFERENCE/DOCKET NUMBER: PF144D1
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 301-309-8504
 TELEFAX: 301-309-8439
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 219 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-09-432-253-2

Query Match 3.8%; Score 7; DB 4; Length 219;
 Best Local Similarity 100.0%; Pred. No. 61;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PEAALR 13
 DB 105 PEAALR 111

RESULT 21

US-09-974-800-2

Sequence 2, Application US/09974800
 Patent No. 6552174
 GENERAL INFORMATION:
 APPLICANT: Wei et al.
 TITLE OF INVENTION: Human MutT2
 FILE REFERENCE: PF144D3
 CURRENT APPLICATION NUMBER: US/09/974,800
 CURRENT FILING DATE: 2001-10-12
 PRIOR APPLICATION NUMBER: US 09/432,253
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: US 08/916,989
 PRIOR FILING DATE: 1997-08-21
 PRIOR APPLICATION NUMBER: US 08/470,261
 PRIOR FILING DATE: 1995-06-06
 PRIOR APPLICATION NUMBER: PCT/US94/13184
 PRIOR FILING DATE: 1994-11-15
 NUMBER OF SEQ ID NOS: 10
 SOFTWARE: Patent in version 3.1
 SEQ ID NO 2
 LENGTH: 219
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-974-800-2

Query Match 3.8%; Score 7; DB 4; Length 219;
 Best Local Similarity 100.0%; Pred. No. 61;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
OY 7 PRAAALR 13
Db 105 PRAAALR 111

RESULT 22
PCT-US94-13187-2
; Sequence 2, Application PC/TUS9413187
; GENERAL INFORMATION:
; APPLICANT: WEI, ET AL.
; TITLE OF INVENTION: Human Mutt2
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN,
; ADDRESSER: CECCHI, STEWART & OLSTEIN
; STREET: 6 BECKER FARM ROAD
; CITY: ROSELAND
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07068
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 INCH DISKETTE
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORD PERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/13187
; FILING DATE: Submitted herewith
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FERRARO, GREGORY D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-245
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 219 AMINO ACIDS
; TYPE: AMINO ACID
; STRANDEDNESS:
; TOPOLOGY: LINEAR
; MOLECULE TYPE: PROTEIN
; PCT-US94-13187-2

Query Match 3.8%; Score 7; DB 5; Length 219;
Best Local Similarity 100.0%; Pred. No. 61;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 7 PRAAALR 13
Db 105 PRAAALR 111

RESULT 23
US-09-252-991A-18075
; Sequence 18075, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCES: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252.991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
```

```
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 18075
; LENGTH: 311
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-18075

Query Match 3.8%; Score 7; DB 4; Length 311;
Best Local Similarity 100.0%; Pred. No. 84;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 9 AAALRPG 15
Db 108 AAALRPG 114

RESULT 24
US-08-400-422-4
; Sequence 4, Application US/08400422
; Patent No. 5681715
; GENERAL INFORMATION:
; APPLICANT: Joergensen, Steen Troels
; APPLICANT: Diderichsen, Boerge Krag
; APPLICANT: Buckley, Catherine M.
; APPLICANT: Hobson, Audrey
; APPLICANT: McConnell, David J.
; TITLE OF INVENTION: A process for the preparation of an active
; TITLE OF INVENTION: Lipase
; NUMBER OF SEQUENCES: 11
; CORRESPONDENCE ADDRESS:
; ADDRESSER: No. 56817150 No. 5681715disk of No. 5681715th America, Inc.
; STREET: 405 Lexington Avenue, 62nd floor
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10174-6201
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/400,422
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/038,763
; FILING DATE: 25-MAR-1993
; APPLICATION NUMBER: PCT/DK91/00402
; FILING DATE: 20-DEC-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/DK92/00391
; FILING DATE: 18-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Lambiris, Elias J.
; REGISTRATION NUMBER: 33,728
; REFERENCE/DOCKET NUMBER: 3663.200-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212 867 0123
; TELEFAX: 212 867 0298
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 344 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Pseudomonas cepacia
; STRAIN: DSM 3401
```

US-08-403-422-4

Query Match 3.8%; Score 7; DB 1; Length 344;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 270 LGPEAAA 276

RESULT 25

US-08-034-650-11
; Sequence 11, Application US/08034650
; Patent No. 5641671
; GENERAL INFORMATION:
; APPLICANT: BOS, Jannetje W.
; APPLICANT: FRENKEN, Leon G.
; APPLICANT: VERRIJPS, Cornelis T.
; APPLICANT: VISSER, Christiaan
; TITLE OF INVENTION: PRODUCTION OF ACTIVE PSEUDOMONAS GLUMAE
; TITLE OF INVENTION: LIPASE IN HOMOLOGOUS OR HETEROLOGOUS HOSTS
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
; STREET: 1615 L. Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20036-5601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION NUMBER: US/08/034,650
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/727,235
; FILING DATE: 03-JUL-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Kokullis, Paul N.
; REGISTRATION NUMBER: 16,773
; REFERENCE/DOCKET NUMBER: PNK/5970/91731
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 861-3000
; TELEFAX: (202) 822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 353 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-034-650-11

Query Match 3.8%; Score 7; DB 1; Length 353;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 281 LGPEAAA 287

RESULT 26

US-08-449-015-11
; Sequence 11, Application US/08449015
; Patent No. 5804409
; GENERAL INFORMATION:
; APPLICANT: BOS, Jannetje W.

; APPLICANT: FRENKEN, Leon G.
; APPLICANT: VERRIJPS, Cornelis T.
; APPLICANT: VISSER, Christiaan
; TITLE OF INVENTION: PRODUCTION OF ACTIVE PSEUDOMONAS GLUMAE
; TITLE OF INVENTION: LIPASE IN HOMOLOGOUS OR HETEROLOGOUS HOSTS
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
; STREET: 1615 L. Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20036-5601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION NUMBER: US/08/449,015
; APPLICATION NUMBER: US/08/449,015
; FILING DATE: 24-MAY-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/727,235
; FILING DATE: 03-JUL-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Kokullis, Paul N.
; REGISTRATION NUMBER: 16,773
; REFERENCE/DOCKET NUMBER: PNK/5970/91731
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 861-3000
; TELEFAX: (202) 822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 353 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-449-015-11

Query Match 3.8%; Score 7; DB 1; Length 353;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 281 LGPEAAA 287

RESULT 27

US-09-252-991A-18707
; Sequence 18707, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 18707
; LENGTH: 409
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-18707

Query Match

3.8%; Score 7; DB 4; Length 409;

Best Local Similarity 100.0%; Pred. No. 1.1e+02; Indels 0; Gaps 0;
Matches 7; Conservative 0; Mismatches 0;

QY 13 RRGWAL 19
Db 87 RRGWAL 93

RESULT 28
US-09-252-991A-25438
; Sequence 25438, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: MARC J. RUBENFIELD ET AL.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT FILING DATE: 1999-02-18
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 25438
; LENGTH: 469
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-25438

Query Match 3.8%; Score 7; DB 4; Length 469;
Best Local Similarity 100.0%; Pred. No. 1.2e+02; Indels 0;
Matches 7; Conservative 0; Mismatches 0;

QY 9 AAALRPG 15
Db 54 AAALRPG 60

RESULT 29
US-09-252-991A-22670
; Sequence 22670, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: MARC J. RUBENFIELD ET AL.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT FILING DATE: 1999-02-18
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 22670
; LENGTH: 556
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-22670

Query Match 3.8%; Score 7; DB 4; Length 556;
Best Local Similarity 100.0%; Pred. No. 1.4e+02; Indels 0;
Matches 7; Conservative 0; Mismatches 0;

QY 11 ALRPGWL 17
Db 418 ALRPGWL 424

RESULT 30
US-08-380-403A-2
; Sequence 2, Application US/08380403A

Patent No. 5831024
; GENERAL INFORMATION:
; APPLICANT: MINATO, Nagahiro
; APPLICANT: HATTORI, Masakazu
; APPLICANT: HIROSHI, Kubota
; APPLICANT: MASATSUGU, Maeda
; TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/380,403A
; FILING DATE: 30-JAN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION NUMBER: US 08/325,909
; FILING DATE: 19-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-279712
; FILING DATE: 20-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-139513
; FILING DATE: 30-MAY-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: WEGNER, Harold C.
; REGISTRATION NUMBER: 25,258
; REFERENCE/DOCKET NUMBER: 53466/128/AAOK
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 693 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-380-403A-2

Query Match 3.8%; Score 7; DB 2; Length 693;
Best Local Similarity 100.0%; Pred. No. 1.8e+02; Indels 0; Gaps 0;
Matches 7; Conservative 0; Mismatches 0;

QY 5 LGPEAAA 11
Db 390 LGPEAAA 396

RESULT 31
US-08-380-403A-5
; Sequence 5, Application US/08380403A
; Patent No. 5831024
; GENERAL INFORMATION:
; APPLICANT: MINATO, Nagahiro
; APPLICANT: HATTORI, Masakazu
; APPLICANT: HIROSHI, Kubota
; APPLICANT: MASATSUGU, Maeda
; TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington

Mon Jun 14 08:48:10 2004

```

STATE: D.C.
COUNTRY: USA
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/380,403A
FILING DATE: 30-JAN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/325,909
FILING DATE: 19-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-279712
FILING DATE: 30-MAY-1994
ATTORNEY/AGENT INFORMATION:
NAME: WEGNER, Harold C.
REGISTRATION NUMBER: 25,258
REFERENCE/DOCKET NUMBER: 53466/128/AAOK
TELEPHONE: (202)672-5300
TELEFAX: (202)672-5399
TELEX: 904136
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 693 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-380-403A-5

Query Match 3.8%; Score 7; DB 2; Length 693;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
DB 390 LGPEAAA 396
|||||

RESULT 32
US-08-895-628-2
Sequence 2, Application US/08895628
Patent No. 5998585
GENERAL INFORMATION:
APPLICANT: MINATO, Nagahiro
APPLICANT: HATTORI, Masakazu
APPLICANT: HIROSHI, Kubota
APPLICANT: MASATSUGU, Maeda
TITLE OF INVENTION: SPA-1 PROTEIN AND GENE CODING THEREFOR
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, N.W., Suite 500
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/895,628
FILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/380,403
FILING DATE: 30-JAN-1995
APPLICATION NUMBER: US 08/325,909
FILING DATE: 19-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-279712
FILING DATE: 20-OCT-1994
APPLICATION NUMBER: JP 6-139513
FILING DATE:
CLASSIFICATION: 536

```

10

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Db      390 LSPAAA 396
|||||
Query Match      3.8%; Score 7; DB 4; Length 705;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      7 PEAALR 13
|||||
Db      375 PEAALR 381

RESULT 36
US-09-252-991A-28353
; Sequence 28353, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/03/252.991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 28353
; LENGTH: 705
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-28353

Query Match      3.8%; Score 7; DB 4; Length 705;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      7 PEAALR 13
|||||
Db      375 PEAALR 381

RESULT 37
US-08-396-479B-4
; Sequence 4, Application US/08396479B
; Patent No. 5612455
; GENERAL INFORMATION:
; APPLICANT: HOEY, Timothy
; TITLE OF INVENTION: NUCLEAR FACTORS AND BINDING ASSAY
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FLEHR, HOBBACH, TEST, ALBRITTON & HERBERT
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/396.479B
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Osman, Richard A
; REGISTRATION NUMBER: 36, 627
; REFERENCE/DOCKET NUMBER: A-59450-1/RAO
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 494-8700
; TELEFAX: (415) 494-8771
; TELEX: 210 277299
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

US-08-396-479B-4
Query Match      3.8%; Score 7; DB 1; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      33 PASSLSS 39
|||||
Db      173 PASSLSS 179

RESULT 38
US-08-818-823-4
; Sequence 4, Application US/08818823
; Patent No. 5708158
; GENERAL INFORMATION:
; APPLICANT: HOEY, Timothy
; TITLE OF INVENTION: NUCLEAR FACTORS AND BINDING ASSAY
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FLEHR, HOBBACH, TEST, ALBRITTON & HERBERT
; STREET: 4 Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/818.823
; FILING DATE: 14-MAR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/396.479
; FILING DATE: 02-MAR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Osman, Richard A
; REGISTRATION NUMBER: 36, 627
; REFERENCE/DOCKET NUMBER: A-59450-1/RAO
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 494-8700
; TELEFAX: (415) 494-8771
; TELEX: 210 277299
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

US-08-818-823-4
Query Match      3.8%; Score 7; DB 1; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      33 PASSLSS 39
|||||
Db      173 PASSLSS 179

RESULT 39
US-09-037-190-38
; Sequence 38, Application US/09037190
; Patent No. 6096515
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6096515thorp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 52
```

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/037,190
; FILING DATE: 09-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.03
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-7000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-037-190-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 33 PASSLSS 39
DB 173 PASSLSS 179

RESULT 40
US-09-037-190-46
; Sequence 46, Application US/09037190
; Patent No. 6096515
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6096515throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NP-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 52
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/037,190
; FILING DATE: 09-MAR-1998
; CLASSIFICATION: 530

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.03
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 46:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-037-190-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 33 PASSLSS 39
DB 173 PASSLSS 179

RESULT 41
US-09-037-192-38
; Sequence 38, Application US/09037192
; Patent No. 6096860
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6096860throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NP-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 52
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/037,192
; FILING DATE: 09-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.04
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid

STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-037-192-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 173 PASSLSS 179

RESULT 42

US-09-037-192-46
Sequence 46, Application US/09037192
Patent No. 6096860

GENERAL INFORMATION:

APPLICANT: Crabtree, Gerald R.
APPLICANT: No. 6096860thorp, Jeffrey P.
APPLICANT: Ho, Steffan M.
TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:

ADDRESSEE: FOLEY, HOAG & ELIOT LLP
STREET: One Post Office Square
CITY: Boston
STATE: MA

COUNTRY: USA

ZIP: 02109-2170

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA: US/09/037,192

APPLICATION NUMBER: US/09/037,192

FILING DATE: 09-MAR-1998

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/260,174

FILING DATE: 13-JUN-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/124,981

FILING DATE: 20-SEP-1993

ATTORNEY/AGENT INFORMATION:

NAME: Vincent, Matthew P.

REGISTRATION NUMBER: 36,709

REFERENCE/DOCKET NUMBER: APV-332.04

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-832-1000

TELEFAX: 617-832-7000

INFORMATION FOR SEQ ID NO: 46:

SEQUENCE CHARACTERISTICS:

LENGTH: 716 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-09-037-192-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 173 PASSLSS 179

RESULT 43

US-09-037-143-38

Sequence 38, Application US/09037143A

Patent No. 6150099
GENERAL INFORMATION:
APPLICANT: Crabtree, Gerald R.
APPLICANT: No. 6150099thorp, Jeffrey P.
APPLICANT: Ho, Steffan M.
TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
FILE REFERENCE: APV-332.05
CURRENT APPLICATION NUMBER: US/09/037,143A
CURRENT FILING DATE: 1998-03-09
EARLIER APPLICATION NUMBER:
EARLIER FILING DATE:
NUMBER OF SEQ ID NOS: 52
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 38
LENGTH: 716
TYPE: PRT
ORGANISM: human
US-09-037-143-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 173 PASSLSS 179

RESULT 44

US-09-037-143-46

Sequence 46, Application US/09037143A

Patent No. 6150099

GENERAL INFORMATION:

APPLICANT: Crabtree, Gerald R.
APPLICANT: No. 6150099thorp, Jeffrey P.
APPLICANT: Ho, Steffan M.
TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
FILE REFERENCE: APV-332.05
CURRENT APPLICATION NUMBER: US/09/037,143A
CURRENT FILING DATE: 1998-03-09
EARLIER APPLICATION NUMBER:
EARLIER FILING DATE:
NUMBER OF SEQ ID NOS: 52
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 46
LENGTH: 716
TYPE: PRT
ORGANISM: human
US-09-037-143-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 173 PASSLSS 179

RESULT 45

US-09-049-691-38

Sequence 38, Application US/09049691

Patent No. 6171781

GENERAL INFORMATION:

APPLICANT: Crabtree, Gerald R.
APPLICANT: No. 6171781thorp, Jeffrey P.
APPLICANT: Ho, Steffan M.
TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY, HOAG & ELIOT LLP
STREET: One Post Office Square
CITY: Boston

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; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-049-691-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 46
US-09-049-691-46
; Sequence 46, Application US/09049691
; Patent No. 617181
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6171781thorp, Jeffrey P.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/049,691
; FILING DATE: 27-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
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; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.09
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 46:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-049-691-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 47
US-08-260-174-38
; Sequence 38, Application US/08260174C
; Patent No. 6197925
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6197925thorp, Jeffrey P.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; FILE REFERENCE: APV-332.02
; CURRENT APPLICATION NUMBER: US/08/260,174C
; CURRENT FILING DATE: 1994-06-13
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38
; LENGTH: 716
; TYPE: PRT
; ORGANISM: human
; US-08-260-174-38

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 48
US-08-260-174-46
; Sequence 46, Application US/08260174C
; Patent No. 6197925
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6197925thorp, Jeffrey P.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; FILE REFERENCE: APV-332.02
; CURRENT APPLICATION NUMBER: US/08/260,174C
; CURRENT FILING DATE: 1994-06-13
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn Ver. 2.0
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; SEQ ID NO 46
; LENGTH: 716
; TYPE: PRT
; ORGANISM: human
; US-08-260-174-46

Query Match 3.8%; Score 7; DB 3; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 49

US-09-338-128A-38
; Sequence 38, Application US/09338128A
; Patent No. 6312899
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6312899throp, Jeffrey P.
; APPLICANT: HO, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; FILE REFERENCE: APV-33211
; CURRENT APPLICATION NUMBER: US/09/338,128A
; CURRENT FILING DATE: 1999-06-22
; PRIOR APPLICATION NUMBER: 08/260,174
; PRIOR FILING DATE: 1994-06-13
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38
; LENGTH: 716
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-338-128A-38

Query Match 3.8%; Score 7; DB 4; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 173 PASSLSS 179

RESULT 50

US-09-338-128A-46
; Sequence 46, Application US/09338128A
; Patent No. 6312899
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6312899throp, Jeffrey P.
; APPLICANT: HO, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; FILE REFERENCE: APV-33211
; CURRENT APPLICATION NUMBER: US/09/338,128A
; CURRENT FILING DATE: 1999-06-22
; PRIOR APPLICATION NUMBER: 08/260,174
; PRIOR FILING DATE: 1994-06-13
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 46
; LENGTH: 716
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-338-128A-46

Query Match 3.8%; Score 7; DB 4; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39

Db 173 PASSLSS 179

Search completed: June 14, 2004, 08:09:22
Job time : 24 secs

89 127 69.8 182 14 US-10-124-813-172 Sequence 172, App
90 127 69.8 182 14 US-10-124-817-172 Sequence 172, App
91 127 69.8 182 14 US-10-125-922-172 Sequence 172, App
92 127 69.8 182 14 US-10-125-924-172 Sequence 172, App
93 127 69.8 182 14 US-10-140-860-172 Sequence 172, App
94 127 69.8 182 14 US-10-142-417-172 Sequence 172, App
95 127 69.8 182 14 US-10-147-519-172 Sequence 172, App
96 127 69.8 182 14 US-10-157-782-172 Sequence 172, App
97 127 69.8 182 14 US-10-152-395-172 Sequence 172, App
98 127 69.8 182 14 US-10-125-926A-172 Sequence 172, App
99 127 69.8 182 14 US-10-125-930A-172 Sequence 172, App
100 127 69.8 182 14 US-10-127-831A-172 Sequence 172, App

ALIGNMENTS

RESULT 1
US-09-739-254-114
; Sequence 114, Application US/09739254
; Patent No. US20010021700A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/739,254
; CURRENT FILING DATE: 2000-12-19
; EARLIER APPLICATION NUMBER: 09/511,554
; EARLIER FILING DATE: 2000-02-23
; EARLIER APPLICATION NUMBER: PCT/US99/19330
; EARLIER FILING DATE: 1999-08-24
; EARLIER APPLICATION NUMBER: 60/097,917
; EARLIER FILING DATE: 1998-08-25
; EARLIER APPLICATION NUMBER: 60/098,634
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-739-254-114

Query Match 100.0%; Score 182; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163; Indels 0; Gaps 0;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNFGRTEFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNFGRTEFLGLDKC 60
Qy 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLSYPANYSDDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLSYPANYSDDSKIWPRVEIFRLVSKY 120
Qy 121 ONEISDRKICASAPKTCSTIERVLRTERFQKWLQAKRLTPDLVQDCHQOQRELFKLCM 180
Db 121 ONEISDRKICASAPKTCSTIERVLRTERFQKWLQAKRLTPDLVQDCHQOQRELFKLCM 180
Qy 181 LR 182
Db 181 LR 182

RESULT 2
US-09-904-615-114
; Sequence 114, Application US/09904615
; Patent No. US20020026040A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/09/904,615

; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-615-114

Query Match 100.0%; Score 182; DB 9; Length 182;

Best Local Similarity 100.0%; Pred. No. 8.7e-163; Indels 0; Gaps 0;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNFGRTEFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNFGRTEFLGLDKC 60
Qy 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLSYPANYSDDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNWLASHLGLPPDSLSYPANYSDDSKIWPRVEIFRLVSKY 120
Qy 121 ONEISDRKICASAPKTCSTIERVLRTERFQKWLQAKRLTPDLVQDCHQOQRELFKLCM 180
Db 121 ONEISDRKICASAPKTCSTIERVLRTERFQKWLQAKRLTPDLVQDCHQOQRELFKLCM 180
Qy 181 LR 182
Db 181 LR 182

RESULT 3

US-10-211-462-217
; Sequence 217, Application US/10211462
; Publication No. US20040033495A1
; GENERAL INFORMATION:
; APPLICANT: Murray, Richard
; APPLICANT: Glynn, Richard
; APPLICANT: Watson, Susan R.
; APPLICANT: Aziz, Natasha
; APPLICANT: Eos Biotechnology, Inc.
; TITLE OF INVENTION: Methods of Diagnosis of Angiogenesis, Compositions and
; TITLE OF INVENTION: Methods of Screening for Angiogenesis Modulators
; FILE REFERENCE: 018501-006200US
; CURRENT APPLICATION NUMBER: US/10/211,462
; CURRENT FILING DATE: 2003-02-13
; PRIOR APPLICATION NUMBER: US 09/784,356
; PRIOR FILING DATE: 2001-02-14
; PRIOR APPLICATION NUMBER: US 09/791,390
; PRIOR FILING DATE: 2001-02-22
; PRIOR APPLICATION NUMBER: US 60/310,025
; PRIOR FILING DATE: 2001-08-03
; PRIOR APPLICATION NUMBER: US 60/334,244
; PRIOR FILING DATE: 2001-11-29
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 217
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-211-462-217

Query Match 100.0%; Score 182; DB 12; Length 182;

Best Local Similarity 100.0%; Pred. No. 8.7e-163; Indels 0; Gaps 0;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNFGRTEFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNFGRTEFLGLDKC 60

Db 1 MEPQLGPEAALRPGWLLWVLSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEEIRSDNWLASHGLPDLSSLYPANYSDDSKIKWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNWLASHGLPDLSSLYPANYSDDSKIKWRPVEIFRLVSKY 120
QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKFCLM 180
Db 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKFCLM 180
QY 181 LR 182
Db 181 LR 182

RESULT 4

US-10-054-988-114
; Sequence 114, Application US/10054988
; Publication No. US20030087341A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/10/054,988
; PRIOR FILING DATE: 2002-01-25
; PRIOR APPLICATION NUMBER: 09/904,615
; PRIOR FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 114
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-054-988-114

Query Match 100.0%; Score 182; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163; Indels 0; Gaps 0;
Matches 182; Conservative 0; Mismatches 0

QY 1 MEPQLGPEAALRPGWLLWVLSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAALRPGWLLWVLSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEEIRSDNWLASHGLPDLSSLYPANYSDDSKIKWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNWLASHGLPDLSSLYPANYSDDSKIKWRPVEIFRLVSKY 120
QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKFCLM 180
Db 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKFCLM 180
QY 181 LR 182
Db 181 LR 182

RESULT 5

US-10-177-293-150
; Sequence 150, Application US/10177293
; Publication No. US20030124128A1
; GENERAL INFORMATION:
; APPLICANT: Lillie, James
; APPLICANT: Glatt, Karen
; APPLICANT: Zhao, Xumei
; APPLICANT: Gannavarpu, Manjula
; APPLICANT: Kamatkar, Shubhangi
; APPLICANT: Mertens, Maureen

; APPLICANT: Myer, Vic
; APPLICANT: Wang, Youzhen
; APPLICANT: Xu, Yongyao
; APPLICANT: Hoersch, Sebastian
; APPLICANT: Monahan, John
; APPLICANT: Meyers, Rachel E.
; APPLICANT: Bast Jr., Robert C.
; APPLICANT: Hortobagyi, Gabriel N.
; APPLICANT: Pusztai, Lajos
; APPLICANT: Mexic, Funda
; APPLICANT: Sabin, Aysegul
; APPLICANT: Mills, Gordon B.
; TITLE OF INVENTION: COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT,
; TITLE OF INVENTION: PREVENTION, AND THERAPY OF BREAST CANCER
; FILE REFERENCE: MRI-038
; CURRENT APPLICATION NUMBER: US/10/177,293
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,887
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/301,572
; PRIOR FILING DATE: 2001-06-27
; PRIOR APPLICATION NUMBER: US 60/306,501
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: US 60/325,002
; PRIOR FILING DATE: 2001-09-25
; PRIOR APPLICATION NUMBER: US 60/362,585
; PRIOR FILING DATE: 2002-03-05
; PRIOR APPLICATION NUMBER: US 60/xxx,xxx
; PRIOR FILING DATE: 2002-05-14
; NUMBER OF SEQ ID NOS: 506
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-177-293-150

Query Match 100.0%; Score 182; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 8.7e-163; Indels 0; Gaps 0;
Matches 182; Conservative 0; Mismatches 0

QY 1 MEPQLGPEAALRPGWLLWVLSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAALRPGWLLWVLSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEEIRSDNWLASHGLPDLSSLYPANYSDDSKIKWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEEIRSDNWLASHGLPDLSSLYPANYSDDSKIKWRPVEIFRLVSKY 120
QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKFCLM 180
Db 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKFCLM 180
QY 181 LR 182
Db 181 LR 182

RESULT 6

US-10-055-098-114
; Sequence 114, Application US/10055098
; Publication No. US20030139954A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/10/055,098
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: EARLIER FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US99/19330
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-08-24
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/097,917

;; PRIOR FILING DATE: EARLIER FILING DATE: 1998-08-25
;; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/098,634
;; PRIOR FILING DATE: EARLIER FILING DATE: 1998-08-31
;; NUMBER OF SEQ ID NOS: 170
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 114
;; LENGTH: 182
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-055-098-114

Query Match 100.0%; Score 182; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 8,7e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKKFKKEIRSDNWLASHGLPPDSLSYPANYSDSKIWPRVPIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLASHGLPPDSLSYPANYSDSKIWPRVPIFRLVSKY 120

QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKLFCM 180
Db 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKLFCM 180

QY 181 LR 182
Db 181 LR 182

RESULT 7
US-09-739-254-168
;; Sequence 168, Application US/09739254
;; Patent No. US20010021700A1
;; GENERAL INFORMATION:
;; APPLICANT: Rosen et al.
;; TITLE OF INVENTION: 49 Human Secreted Proteins
;; FILE REFERENCE: P2032P1
;; CURRENT APPLICATION NUMBER: US/09/739,254
;; CURRENT FILING DATE: 2000-12-19
;; EARLIER APPLICATION NUMBER: 09/511,554
;; EARLIER FILING DATE: 2000-02-23
;; EARLIER APPLICATION NUMBER: PCT/US99/19330
;; EARLIER FILING DATE: 1999-08-24
;; EARLIER APPLICATION NUMBER: 60/097,917
;; EARLIER FILING DATE: 1998-08-25
;; EARLIER APPLICATION NUMBER: 60/098,634
;; EARLIER FILING DATE: 1998-08-31
;; NUMBER OF SEQ ID NOS: 170
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 168
;; LENGTH: 209
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-739-254-168

Query Match 100.0%; Score 182; DB 9; Length 209;
Best Local Similarity 100.0%; Pred. No. 9,8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 28 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 87

QY 61 NACIGTSICKKFKKEIRSDNWLASHGLPPDSLSYPANYSDSKIWPRVPIFRLVSKY 120
Db 88 NACIGTSICKKFKKEIRSDNWLASHGLPPDSLSYPANYSDSKIWPRVPIFRLVSKY 147

QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKLFCM 180
Db 148 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKLFCM 207

QY 181 LR 182
Db 208 LR 209

RESULT 8
US-09-904-615-168
;; Sequence 168, Application US/09904615
;; Patent No. US20020026040A1
;; GENERAL INFORMATION:
;; APPLICANT: Rosen et al.
;; TITLE OF INVENTION: 49 Human Secreted Proteins
;; FILE REFERENCE: P2032P1
;; CURRENT APPLICATION NUMBER: US/09/904,615
;; CURRENT FILING DATE: 2001-07-16
;; PRIOR APPLICATION NUMBER: 09/511,554
;; PRIOR FILING DATE: 2000-02-23
;; PRIOR APPLICATION NUMBER: 60/097,917
;; PRIOR FILING DATE: 1998-08-25
;; PRIOR APPLICATION NUMBER: 60/098,634
;; PRIOR FILING DATE: 1998-08-31
;; NUMBER OF SEQ ID NOS: 170
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 168
;; LENGTH: 209
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-904-615-168

Query Match 100.0%; Score 182; DB 9; Length 209;
Best Local Similarity 100.0%; Pred. No. 9,8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 28 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 87

QY 61 NACIGTSICKKFKKEIRSDNWLASHGLPPDSLSYPANYSDSKIWPRVPIFRLVSKY 120
Db 88 NACIGTSICKKFKKEIRSDNWLASHGLPPDSLSYPANYSDSKIWPRVPIFRLVSKY 147

QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKLFCM 180
Db 148 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKLFCM 207

RESULT 9
US-10-054-988-168
;; Sequence 168, Application US/10054988
;; Publication No. US20030087341A1
;; GENERAL INFORMATION:
;; APPLICANT: Rosen et al.
;; TITLE OF INVENTION: 49 Human Secreted Proteins
;; FILE REFERENCE: P2032P1
;; CURRENT APPLICATION NUMBER: US/10/054,988
;; CURRENT FILING DATE: 2002-01-25
;; PRIOR APPLICATION NUMBER: 09/904,615
;; PRIOR FILING DATE: 2001-07-16
;; PRIOR APPLICATION NUMBER: 09/511,554
;; PRIOR FILING DATE: 2000-02-23
;; PRIOR APPLICATION NUMBER: 60/097,917
;; PRIOR FILING DATE: 1998-08-25
;; PRIOR APPLICATION NUMBER: 60/098,634
;; PRIOR FILING DATE: 1998-08-31
;; NUMBER OF SEQ ID NOS: 170
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 168
;; LENGTH: 209

Query Match 100.0%; Score 182; DB 9; Length 209;
Best Local Similarity 100.0%; Pred. No. 9,8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 60
Db 28 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVRTSYNFGRTFLGLDKC 87

QY 61 NACIGTSICKKFKKEIRSDNWLASHGLPPDSLSYPANYSDSKIWPRVPIFRLVSKY 120
Db 88 NACIGTSICKKFKKEIRSDNWLASHGLPPDSLSYPANYSDSKIWPRVPIFRLVSKY 147

QY 121 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKLFCM 180
Db 148 QNEISDRKICASAPKTCSTIERVLKTERFQKWLQAKRLTPDLVQDCHQORELKLFCM 207

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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-054-988-168

Query Match      100.0%; Score 182; DB 14; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60
Db 28 MEPQLGPEAAALRPGWALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 87
QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVPIFRVLVSKY 120
Db 88 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVPIFRVLVSKY 147
QY 121 ONEISDRKICASAPKTCSTIERVLRKTERFQKWLQAKRLTPDLVQDCHQGORELKLFLCM 180
Db 148 ONEISDRKICASAPKTCSTIERVLRKTERFQKWLQAKRLTPDLVQDCHQGORELKLFLCM 207
QY 181 LR 182
Db 208 LR 209

RESULT 10
US-10-055-098-168
; Sequence 168, Application US/10055098
; Publication No. US20030139954A1
; GENERAL INFORMATION:
; TITLE OF INVENTION: 49 Human Secreted Proteins
; FILE REFERENCE: P2032P1
; CURRENT APPLICATION NUMBER: US/10/055,098
; PRIOR FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/511,554
; PRIOR FILING DATE: EARLIER FILING DATE: 2000-02-23
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US99/19330
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-08-24
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/097,917
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-08-25
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/098,634
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 168
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-055-098-168

Query Match      100.0%; Score 182; DB 14; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.8e-163;
Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60
Db 28 MEPQLGPEAAALRPGWALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 87
QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVPIFRVLVSKY 120
Db 88 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVPIFRVLVSKY 147
QY 121 ONEISDRKICASAPKTCSTIERVLRKTERFQKWLQAKRLTPDLVQDCHQGORELKLFLCM 180
Db 148 ONEISDRKICASAPKTCSTIERVLRKTERFQKWLQAKRLTPDLVQDCHQGORELKLFLCM 207
QY 181 LR 182
Db 208 LR 209

RESULT 11

```

```

US-09-965-528-10
; Sequence 10, Application US/09965528
; Publication No. US20020187523A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: LAL, Preeti
; APPLICANT: BURFORD, Neil
; APPLICANT: RANDMAN, Olga
; APPLICANT: BAUGHN, Mariah R.
; APPLICANT: AZIMZAI, Yalda
; APPLICANT: LU, Dyoung Aina M.
; APPLICANT: PATTERSON, Chandra
; TITLE OF INVENTION: EXTRACELLULAR SIGNALING MOLECULES
; FILE REFERENCE: PF-0701 USA
; CURRENT APPLICATION NUMBER: US/09/965,528
; CURRENT FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/134,949
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/144,270
; PRIOR FILING DATE: 1999-07-15
; PRIOR APPLICATION NUMBER: 60/146,700
; PRIOR FILING DATE: 1999-07-30
; PRIOR APPLICATION NUMBER: 60/157,508
; PRIOR FILING DATE: 1999-10-04
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PERL Program
; SEQ ID NO 10
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20020187523A1 5090841CD1
US-09-965-528-10

Query Match      69.8%; Score 127; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60
QY 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVPIFRVLVSKY 120
Db 61 NACIGTSICKKFFKEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVPIFRVLVSKY 120
QY 121 ONEISDR 127
Db 121 ONEISDR 127

RESULT 12
US-10-147-493-172
; Sequence 172, Application US/10147493
; Publication No. US20040029217A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.

```

APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C345
CURRENT APPLICATION NUMBER: US/10/147,493
CURRENT FILING DATE: 2002-05-17
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-147-493-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNGRTFLGLDKC 60
DB 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDLSLSPANYSDSKIWRRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDLSLSPANYSDSKIWRRPVEIFRLVSKY 120
QY 121 ONEISDR 127
DB 121 ONEISDR 127

RESULT 13
US-10-145-127-172
Sequence 172, Application US/10145127
Publication No. US20040033558A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C252
CURRENT APPLICATION NUMBER: US/10/145,127
CURRENT FILING DATE: 2002-05-13
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-145-127-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNGRTFLGLDKC 60
DB 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDLSLSPANYSDSKIWRRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDLSLSPANYSDSKIWRRPVEIFRLVSKY 120
QY 121 ONEISDR 127
DB 121 ONEISDR 127

DB 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDLSLSPANYSDSKIWRRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDLSLSPANYSDSKIWRRPVEIFRLVSKY 120
QY 121 ONEISDR 127
DB 121 ONEISDR 127

RESULT 14
US-10-160-503-172
Sequence 172, Application US/10160503
Publication No. US20040033559A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C446
CURRENT APPLICATION NUMBER: US/10/160,503
CURRENT FILING DATE: 2002-05-30
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-160-503-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNGRTFLGLDKC 60
DB 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDLSLSPANYSDSKIWRRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFKKEIRSDNWLASHGLPDDLSLSPANYSDSKIWRRPVEIFRLVSKY 120
QY 121 ONEISDR 127
DB 121 ONEISDR 127

RESULT 15
US-10-143-118-172
Sequence 172, Application US/10143118
Publication No. US20040038335A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: DeForge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen

```
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C228
; CURRENT APPLICATION NUMBER: US/10/143,118
; CURRENT FILING DATE: 2002-05-09
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-10-143-118-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSSLPVQRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSSLPVQRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKFFKFEIRSDNWLASHLGLPDSLLSYDPANYSDDSKIWPRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKFEIRSDNWLASHLGLPDSLLSYDPANYSDDSKIWPRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 16
US-10-144-993-172
; Sequence 172, Application US/10144993
; Publication No. US20040038336A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C449
; CURRENT APPLICATION NUMBER: US/10/158,787
; CURRENT FILING DATE: 2003-04-03
; Prior Application Number: 60/049911
; Prior Filing Date: 1997-06-18
; Prior Application Number: 60/056974
; Prior Filing Date: 1997-08-26
; Prior Application Number: 60/059113
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059115
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059117
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059122
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059184
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059263
; Prior Filing Date: 1997-09-18
; Prior Application Number: 60/059352
; Prior Filing Date: 1997-09-19
; Prior Application Number: 60/059588
; Prior Filing Date: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
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; TYPE: PRT
; ORGANISM: Homo Sapien
; US-10-144-993-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSSLPVQRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFLPASSLSSLPVQRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKFFKFEIRSDNWLASHLGLPDSLLSYDPANYSDDSKIWPRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKFEIRSDNWLASHLGLPDSLLSYDPANYSDDSKIWPRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 17
US-10-158-787-172
; Sequence 172, Application US/10158787
; Publication No. US20040039164A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C449
; CURRENT APPLICATION NUMBER: US/10/158,787
; CURRENT FILING DATE: 2003-04-03
; Prior Application Number: 60/049911
; Prior Filing Date: 1997-06-18
; Prior Application Number: 60/056974
; Prior Filing Date: 1997-08-26
; Prior Application Number: 60/059113
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059115
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059117
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059122
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059184
; Prior Filing Date: 1997-09-17
; Prior Application Number: 60/059263
; Prior Filing Date: 1997-09-18
; Prior Application Number: 60/059352
; Prior Filing Date: 1997-09-19
; Prior Application Number: 60/059588
; Prior Filing Date: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
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; CURRENT APPLICATION NUMBER: US/10/140,808
; CURRENT FILING DATE: 2002-05-07
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-140-808-172

Query Match          69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111; Gaps 0
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY      1 MEPOLGPEMAALRPGWLALLLWVALSCFSGLPASSLSLLVPQVRTSYNFGTTFGLGLDKC 60
        |||
Dd      1 MEPOLGPEMAALRPGWLALLLWVALSCFSGLPASSLSLLVPQVRTSYNFGTTFGLGLDKC 60
        |||

QY      61 NACIGTSICKFFKKEIRSDNWNLASHLGLPDPSLLSYNPANTYSDDSKKIWRPVEIFPLVSKY 120
        |||
Dd      61 NACIGTSICKFFKKEIRSDNWNLASHLGLPDPSLLSYNPANTYSDDSKKIWRPVEIFPLVSKY 120
        |||

QY      121 QNEISDR 127
        |||||
Dd      121 QNEISDR 127
        |||||
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RESULT 21
US-10-152-405-172
Sequence 172, Application US/10152405
Publication No. US20030211571A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Beresini, Maureen
APPLICANT: Deforge, Laura
APPLICANT: Desnoyers, Luc
APPLICANT: Filvaroff, Ellen
APPLICANT: Gao, Wei-Qiang
APPLICANT: Geritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Sherwood, Steven
APPLICANT: Smith, Victoria
APPLICANT: Stewart, Timothy A.
APPLICANT: Tamas, Daniel
APPLICANT: Watanabe, Colin K
APPLICANT: Wood, William
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3330R1C383
CURRENT APPLICATION NUMBER: US/10/152,405
CURRENT FILING DATE: 2002-05-20
Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 172
LENGTH: 182
TYPE: PRT
ORGANISM: Homo Sapien
US-10-152-405-172

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Qy 121 ONEISDR 127
Db 121 ONEISDR 127

RESULT 22
US-10-127-852A-172
; Sequence 172, Application US/10127852A
; Publication No. US20030203428A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330RIC88
; CURRENT APPLICATION NUMBER: US/10/127,852A
; CURRENT FILING DATE: 2002-10-15
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-10-127-852A-172

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Mon Jun 14 08:48:10 2004

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Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 23
US-10-127-900A-172
; Sequence 172, Application US/10127900A
; Publication No. US20030203429A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: F3330R1C81
; CURRENT APPLICATION NUMBER: US/10/127,900A
; CURRENT FILING DATE: 2002-10-15
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-127-900A-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLLALLVWSALSCFSLPASSLSLLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLLALLVWSALSCFSLPASSLSLLVPQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSGCKFFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSGCKFFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 24
US-10-128-685A-172
; Sequence 172, Application US/10128685A
; Publication No. US20030203430A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Deforge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: F3330R1C116
; CURRENT APPLICATION NUMBER: US/10/128,685A
; CURRENT FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-128-685A-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPQLGPEAAALRPGWLLALLVWSALSCFSLPASSLSLLVPQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLLALLVWSALSCFSLPASSLSLLVPQVRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSGCKFFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSGCKFFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
Db 121 QNEISDR 127
```

Db 121 QNEISDR 127

RESULT 25

US-10-131-820A-172
; Sequence 172, Application US/10131820A
; Publication No. US20030203432A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C144
; CURRENT APPLICATION NUMBER: US/10131,820A
; PRIOR FILING DATE: 2002-10-17
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-131-820A-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWALLLVWVLSALSCSFSLPASSLSLVQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWALLLVWVLSALSCSFSLPASSLSLVQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPDSLSYPANYSDDSKIWRFVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPDSLSYPANYSDDSKIWRFVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 26

US-10-142-886-172
; Sequence 172, Application US/10142886
; Publication No. US20030203432A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C236
; CURRENT APPLICATION NUMBER: US/10142,886
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-886-172

Query Match 69.8%; Score 127; DB 12; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MEPQLGPEAAALRPGWALLLVWVLSALSCSFSLPASSLSLVQVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWALLLVWVLSALSCSFSLPASSLSLVQVRTSYNFGRTFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPDSLSYPANYSDDSKIWRFVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPDSLSYPANYSDDSKIWRFVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 27

US-10-146-728-172
; Sequence 172, Application US/10146728
; Publication No. US20030203437A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel

;
; PRIOR FILING DATE: 1997-12-11
; PRIOR APPLICATION NUMBER: 60/069694
; PRIOR FILING DATE: 1997-12-16
; PRIOR APPLICATION NUMBER: 60/072320
; PRIOR FILING DATE: 1998-01-23
; PRIOR APPLICATION NUMBER: 60/073612
; PRIOR FILING DATE: 1998-02-04
; PRIOR APPLICATION NUMBER: 60/074086
; PRIOR FILING DATE: 1998-02-09
; PRIOR APPLICATION NUMBER: 60/074032
; PRIOR FILING DATE: 1998-02-09
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079663
; PRIOR FILING DATE: 1998-02-27
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/080165
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/081203
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081229
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081695
; PRIOR FILING DATE: 1998-04-14
; PRIOR APPLICATION NUMBER: 60/081817
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081818
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/082999
; PRIOR FILING DATE: 1998-04-24
; PRIOR APPLICATION NUMBER: 60/083322
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/083545
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/084600
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084627
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084637
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/085149
; PRIOR FILING DATE: 1998-05-12
; PRIOR APPLICATION NUMBER: 60/085323
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085338
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085339
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085579
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/086414
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/086430
; PRIOR FILING DATE: 1998-05-22
; PRIOR APPLICATION NUMBER: 60/087106
; PRIOR FILING DATE: 1998-05-28
; PRIOR APPLICATION NUMBER: 60/088026
; PRIOR FILING DATE: 1998-06-04
; PRIOR APPLICATION NUMBER: 60/088730
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088741
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088810
; PRIOR FILING DATE: 1998-06-10

;
; PRIOR APPLICATION NUMBER: 60/088358
; PRIOR FILING DATE: 1998-06-11
; PRIOR APPLICATION NUMBER: 60/089532
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089599
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089907
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089947
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/090349
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090429
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090445
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090538
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090863
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/091360
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091519
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091982
; PRIOR FILING DATE: 1998-07-07

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAAALRPGWLALLLWVSALSCSSFLPASSLSLVSIPQVTRTSYNGRTFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLALLLWVSALSCSSFLPASSLSLVSIPQVTRTSYNGRTFLGLDKC 60
Qy 61 NACIGTSGICKFFKEIRSDNWLASHLGLPDSLSLSPANTYSDPSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSGICKFFKEIRSDNWLASHLGLPDSLSLSPANTYSDPSKIWRPVEIFRLVSKY 120
Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 32

US-10-121-049-172
; Sequence 172, Application US/10121049
; Publication No. US20030022239A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P333081C17
; CURRENT APPLICATION NUMBER: US/10/121,049
; PRIOR FILING DATE: 2002-04-12
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550

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; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-121-049-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKFEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTSICKFFKFEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

```

```

RESULT 33
US-10-123-904-172
; Sequence 172, Application US/10123904
; Publication No. US20030022328A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330RLC54
; CURRENT FILING DATE: 2002-04-16
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-123-904-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 102.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKFEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTSICKFFKFEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

```

```

RESULT 34
US-10-140-470-172
; Sequence 172, Application US/10140470
; Publication No. US20030022331A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330RLC160
; CURRENT APPLICATION NUMBER: US/10/140,470
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-140-470-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 130.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVPOVRTSYNFGRTFLGLDKC 60

QY 61 NACIGTSICKFFKFEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVEIFRLVSKY 120
Db 61 NACIGTSICKFFKFEIRSDNWLASHLGLPPDSLLSYPNYSDSKIWPRVEIFRLVSKY 120

QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 35
US-10-175-746-172
; Sequence 172, Application US/10175746
; Publication No. US2003002270A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel

```

; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P333ORIC353
; CURRENT APPLICATION NUMBER: US/10/175,746
; CURRENT FILING DATE: 2002-06-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-175-746-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVTSYNGRTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 36
US-10-176-918-172
; Sequence 172, Application US/10176918
; Publication No. US2003002725A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P333ORIC382
; CURRENT APPLICATION NUMBER: US/10/176,918
; CURRENT FILING DATE: 2002-06-20
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-918-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVTSYNGRTFLGLDKC 60

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVTSYNGRTFLGLDKC 60

DB 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 37
US-10-176-921-172
; Sequence 172, Application US/10176921
; Publication No. US2003002726A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P333ORIC288
; CURRENT APPLICATION NUMBER: US/10/176,921
; CURRENT FILING DATE: 2002-06-20
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-921-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVTSYNGRTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLWVSALSCSFLPASSLSLVPQVTSYNGRTFLGLDKC 60
QY 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
DB 61 NACIGTSICKKFKKEIRSDNWLASHLGLPPDSLLSYPNYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 38
US-10-137-865-172
; Sequence 172, Application US/10137865
; Publication No. US20030032155A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc


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; APPLICANT: Filvaroff,Ellen
; APPLICANT: Gao,Wei-Qiang
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Gurney,Austin L.
; APPLICANT: Sherwood,Steven
; APPLICANT: Smith,Victoria
; APPLICANT: Stewart,Timothy A.
; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang,Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P330R1C154
; CURRENT APPLICATION NUMBER: US/10/137,865
; CURRENT FILING DATE: 2002-05-03
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRF
; ORGANISM: Homo Sapien
US-10-137-865-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111; Mismatches 0; Indels 0; Gaps 0;
Matches 127; Conservative 0;

Qy 1 MEPQLGPEAAALRPGLALLLWVSALSCSFLPASSLSLVPPVQRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGLALLLWVSALSCSFLPASSLSLVPPVQRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKKFKKEIRSDNWLAHLGLPDSLLSPANYSDSKIWPRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLAHLGLPDSLLSPANYSDSKIWPRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 39
US-10-140-474-172
; Sequence 172, Application US/10140474
; Publication No. US20030032156A1
; GENERAL INFORMATION:
; APPLICANT: Baker,Kevin P.
; APPLICANT: Beresini,Maureen
; APPLICANT: DeForge,Laura
; APPLICANT: Desnoyers,Luc
; APPLICANT: Filvaroff,Ellen
; APPLICANT: Gao,Wei-Qiang
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Gurney,Austin L.
; APPLICANT: Sherwood,Steven
; APPLICANT: Smith,Victoria
; APPLICANT: Stewart,Timothy A.
; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang,Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P330R1C162
; CURRENT APPLICATION NUMBER: US/10/140,474
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRF
; ORGANISM: Homo Sapien
US-10-140-474-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111; Mismatches 0; Indels 0; Gaps 0;
Matches 127; Conservative 0;

Qy 1 MEPQLGPEAAALRPGLALLLWVSALSCSFLPASSLSLVPPVQRTSYNFGRTFLGLDKC 60
Db 1 MEPQLGPEAAALRPGLALLLWVSALSCSFLPASSLSLVPPVQRTSYNFGRTFLGLDKC 60

Qy 61 NACIGTSICKKFKKEIRSDNWLAHLGLPDSLLSPANYSDSKIWPRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFKKEIRSDNWLAHLGLPDSLLSPANYSDSKIWPRPVEIFRLVSKY 120

Qy 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 39
US-10-140-474-172
; Sequence 172, Application US/10140474
; Publication No. US20030032156A1
; GENERAL INFORMATION:
; APPLICANT: Baker,Kevin P.
; APPLICANT: Beresini,Maureen
; APPLICANT: DeForge,Laura
; APPLICANT: Desnoyers,Luc
; APPLICANT: Filvaroff,Ellen
; APPLICANT: Gao,Wei-Qiang
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Gurney,Austin L.
; APPLICANT: Sherwood,Steven
; APPLICANT: Smith,Victoria
; APPLICANT: Stewart,Timothy A.
; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang,Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P330R1C162
; CURRENT APPLICATION NUMBER: US/10/140,474
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172

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RESULT 41
US-10-143-114-172
; Sequence 172, Application US/10143114
; Publication No. US20030036180A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C211
; CURRENT APPLICATION NUMBER: US/10/143,114
; CURRENT FILING DATE: 2002-05-09
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-143-114-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEFOLGPEAAALPGWLALLWVSALSCFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
Db 1 MEFOLGPEAAALPGWLALLWVSALSCFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
QY 61 NACIGTSICKFKKEIRSDNWLASHGLPDSLSYPANYSDDSKWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFKKEIRSDNWLASHGLPDSLSYPANYSDDSKWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 42
US-10-140-002-172
; Sequence 172, Application US/10140002
; Publication No. US20030037623A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C244
; CURRENT APPLICATION NUMBER: US/10/142,419
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-419-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEFOLGPEAAALPGWLALLWVSALSCFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
Db 1 MEFOLGPEAAALPGWLALLWVSALSCFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
QY 61 NACIGTSICKFKKEIRSDNWLASHGLPDSLSYPANYSDDSKWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFKKEIRSDNWLASHGLPDSLSYPANYSDDSKWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 43
US-10-142-419-172
; Sequence 172, Application US/10142419
; Publication No. US20030044945A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C244
; CURRENT APPLICATION NUMBER: US/10/142,419
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-419-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEFOLGPEAAALPGWLALLWVSALSCFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
Db 1 MEFOLGPEAAALPGWLALLWVSALSCFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
QY 61 NACIGTSICKFKKEIRSDNWLASHGLPDSLSYPANYSDDSKWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFKKEIRSDNWLASHGLPDSLSYPANYSDDSKWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127
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Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVTSYNFGRTEFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 44
US-10-123-262-172
; Sequence 172, Application US/10123262
; Publication No. US20030049816A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P333081C38
; CURRENT APPLICATION NUMBER: US/10/123,262
; CURRENT FILING DATE: 2002-04-15
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-123-262-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVTSYNFGRTEFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVTSYNFGRTEFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 45
US-10-142-423-172
; Sequence 172, Application US/10142423
; Publication No. US20030049817A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P333081C20
; CURRENT APPLICATION NUMBER: US/10/121,050
; CURRENT FILING DATE: 2002-04-12
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-423-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVTSYNFGRTEFLGLDKC 60
Db 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLVLPQVTSYNFGRTEFLGLDKC 60
QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLSLSPANYSDDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDSLSLSPANYSDDSKIWRPVEIFRLVSKY 120
QY 121 QNEISDR 127
Db 121 QNEISDR 127

RESULT 46
US-10-121-050-172
; Sequence 172, Application US/10121050
; Publication No. US20030054516A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P333081C20
; CURRENT APPLICATION NUMBER: US/10/121,050
; CURRENT FILING DATE: 2002-04-12
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-142-423-172
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; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-121-050-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60

QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
DB 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 47
US-10-141-755-172
; Sequence 172, Application US/10141755
; Publication No. US20030054517A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C245
; CURRENT APPLICATION NUMBER: US/10/141,755
; CURRENT FILING DATE: 2002-05-08
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-141-755-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60

QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
DB 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 48
US-10-143-032-172
; Sequence 172, Application US/10143032
; Publication No. US20030059909A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C245
; CURRENT APPLICATION NUMBER: US/10/143,032
; CURRENT FILING DATE: 2002-05-10
; Prior Application removed - See File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-143-032-172

Query Match      69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60
DB 1 MEPQLGPEAAALRPGWLALLLWVSALSCSFSLPQVTSYNFGRFTFLGLDKC 60

QY 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120
DB 61 NACIGTSICKFFKEIRSDNWLASHLGLPPDLSLSPANYSDDSKIWRPVEIFRLVSKY 120

QY 121 QNEISDR 127
DB 121 QNEISDR 127

RESULT 49
US-10-123-108-172
; Sequence 172, Application US/10123108
; Publication No. US20030068793A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
```

APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P333CR1C36
CURRENT FILING DATE: 2002-04-15
PRIORITY APPLICATION NUMBER: US/12/123,108
PRIORITY FILING DATE: 1997-06-18
PRIORITY APPLICATION NUMBER: 60/049511
PRIORITY FILING DATE: 1997-08-26
PRIORITY APPLICATION NUMBER: 60/056974
PRIORITY FILING DATE: 1997-09-17
PRIORITY APPLICATION NUMBER: 60/059113
PRIORITY FILING DATE: 1997-09-17
PRIORITY APPLICATION NUMBER: 60/059115
PRIORITY FILING DATE: 1997-09-17
PRIORITY APPLICATION NUMBER: 60/059117
PRIORITY FILING DATE: 1997-09-17
PRIORITY APPLICATION NUMBER: 60/059122
PRIORITY FILING DATE: 1997-09-17
PRIORITY APPLICATION NUMBER: 60/059184
PRIORITY FILING DATE: 1997-09-17
PRIORITY APPLICATION NUMBER: 60/059263
PRIORITY FILING DATE: 1997-09-18
PRIORITY APPLICATION NUMBER: 60/059352
PRIORITY FILING DATE: 1997-09-19
PRIORITY APPLICATION NUMBER: 60/059588
PRIORITY FILING DATE: 1997-09-19
PRIORITY APPLICATION NUMBER: 60/059836
PRIORITY FILING DATE: 1997-09-24
PRIORITY APPLICATION NUMBER: 60/062250
PRIORITY FILING DATE: 1997-10-17
PRIORITY APPLICATION NUMBER: 60/062285
PRIORITY FILING DATE: 1997-10-17
PRIORITY APPLICATION NUMBER: 60/062287
PRIORITY FILING DATE: 1997-10-17
PRIORITY APPLICATION NUMBER: 60/062814
PRIORITY FILING DATE: 1997-10-24
PRIORITY APPLICATION NUMBER: 60/062816
PRIORITY FILING DATE: 1997-10-24
PRIORITY APPLICATION NUMBER: 60/063045
PRIORITY FILING DATE: 1997-10-24
PRIORITY APPLICATION NUMBER: 60/063082
PRIORITY FILING DATE: 1997-10-31
PRIORITY APPLICATION NUMBER: 60/063127
PRIORITY FILING DATE: 1997-10-24
PRIORITY APPLICATION NUMBER: 60/063327
PRIORITY FILING DATE: 1997-10-27
PRIORITY APPLICATION NUMBER: 60/063329
PRIORITY FILING DATE: 1997-10-27
PRIORITY APPLICATION NUMBER: 60/063550
PRIORITY FILING DATE: 1997-10-28
PRIORITY APPLICATION NUMBER: 60/063561
PRIORITY FILING DATE: 1997-10-28
PRIORITY APPLICATION NUMBER: 60/063704
PRIORITY FILING DATE: 1997-10-29
PRIORITY APPLICATION NUMBER: 60/063733
PRIORITY FILING DATE: 1997-10-29
PRIORITY APPLICATION NUMBER: 60/063735
PRIORITY FILING DATE: 1997-10-29
PRIORITY APPLICATION NUMBER: 60/063738
PRIORITY FILING DATE: 1997-10-29
PRIORITY APPLICATION NUMBER: 60/063755
PRIORITY FILING DATE: 1997-10-17
PRIORITY APPLICATION NUMBER: 60/064248
PRIORITY FILING DATE: 1997-11-03
PRIORITY APPLICATION NUMBER: 60/064809
PRIORITY FILING DATE: 1997-11-07
PRIORITY APPLICATION NUMBER: 60/065186
PRIORITY FILING DATE: 1997-11-12
PRIORITY APPLICATION NUMBER: 60/065846
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PRIORITY FILING DATE: 1997-11-21
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PRIORITY FILING DATE: 1998-02-04
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PRIORITY APPLICATION NUMBER: 60/079294
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PRIORITY APPLICATION NUMBER: 60/079663
PRIORITY FILING DATE: 1998-02-27
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PRIORITY APPLICATION NUMBER: 60/081229
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PRIORITY APPLICATION NUMBER: 60/081695
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PRIORITY APPLICATION NUMBER: 60/085149
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PRIORITY APPLICATION NUMBER: 60/085323
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PRIORITY APPLICATION NUMBER: 60/085704
PRIORITY FILING DATE: 1998-05-15
PRIORITY APPLICATION NUMBER: 60/086414
PRIORITY FILING DATE: 1998-05-22
PRIORITY APPLICATION NUMBER: 60/086430
PRIORITY FILING DATE: 1998-05-22

; PRIOR APPLICATION NUMBER: 60/087106
; PRIOR FILING DATE: 1998-05-28
; PRIOR APPLICATION NUMBER: 60/088026
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; PRIOR APPLICATION NUMBER: 60/088730
; PRIOR FILING DATE: 1998-06-10
; PRIOR APPLICATION NUMBER: 60/088741
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; PRIOR APPLICATION NUMBER: 60/089532
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; PRIOR APPLICATION NUMBER: 60/089599
; PRIOR FILING DATE: 1998-06-17
; PRIOR APPLICATION NUMBER: 60/089907
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: 60/089947
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: 60/090349
; PRIOR FILING DATE: 1998-06-23
; PRIOR APPLICATION NUMBER: 60/090429
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090445
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090538
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: 60/090863
; PRIOR FILING DATE: 1998-06-26
; PRIOR APPLICATION NUMBER: 60/091360
; PRIOR FILING DATE: 1998-07-01
; PRIOR APPLICATION NUMBER: 60/091519
; PRIOR FILING DATE: 1998-07-02
; PRIOR APPLICATION NUMBER: 60/091982

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLSPVQVTSYNGRTFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLSPVQVTSYNGRTFLGLDKC 60

Qy 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWRPVEIFRLVSKY 120

Qy 121 ONEISDR 127
Db 121 ONEISDR 127

RESULT 50
US-10-123-236-172
; Sequence 172, Application US/10123236
; Publication No. US20030068795A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K

; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C33
; CURRENT APPLICATION NUMBER: US/10/123,236
; CURRENT FILING DATE: 2002-04-15
; Prior Application removed - See File Wrapper or Palm
; SEQ ID NO 172
; LENGTH: 182
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-123-236-172

Query Match 69.8%; Score 127; DB 14; Length 182;
Best Local Similarity 100.0%; Pred. No. 4.2e-111;
Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLSPVQVTSYNGRTFLGLDKC 60
Db 1 MEPOLGPEAAALRPGWLALLLWVSALSCSFSLPASSLSLSPVQVTSYNGRTFLGLDKC 60

Qy 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWRPVEIFRLVSKY 120
Db 61 NACIGTSICKKFFKEEIRSDNWLASHLGLPPDLSLSPANYSDSKIWRPVEIFRLVSKY 120

Qy 121 ONEISDR 127
Db 121 ONEISDR 127

Search completed: June 14, 2004, 08:10:19
Job time : 45 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 14, 2004, 08:04:11 ; Search time 20 Seconds
(without alignments)
875.343 Million cell updates/sec

Title: US-10-054-988-114

Perfect score: 182

Sequence: 1 MFPLGPEAAALRPGLWALL.....DLVQDCHQGQRELKFLCMLR 182

Scoring table: CLIGO

Gapop 60.0 , Gapext 60.0

Searched: 283366 seqs, 96191526 residues

Word size : 3

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 3

Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database :

PIR 78:*

1: Pirl:*

2: Pirl2:*

3: Pirl3:*

4: Pirl4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	8	4.4	271	2 G70777	hypothetical prote
2	8	4.4	543	2 E95057	Na/Pi cotransporte
3	8	4.4	543	2 G97926	conserved hypotet
4	7	3.8	111	2 S25343	QR15 protein - yea
5	7	3.8	130	2 G72639	hypothetical prote
6	7	3.8	132	2 F96773	probable ribosomal
7	7	3.8	147	2 S76142	hypothetical prote
8	7	3.8	192	2 S53555	probable membrane
9	7	3.8	208	2 T52450	ribosomal protein
10	7	3.8	222	2 A75406	hydrolase - Deinoc
11	7	3.8	223	2 S16267	auxin-induced prot
12	7	3.8	251	2 AH3314	hypothetical membr
13	7	3.8	258	2 AD0615	probable membrane
14	7	3.8	259	2 G64831	probable membrane
15	7	3.8	259	2 C90754	hypothetical prote
16	7	3.8	259	2 A85618	hypothetical prote
17	7	3.8	266	2 H82387	glucosamine-6-phos
18	7	3.8	270	2 F64050	glucosamine-6-phos
19	7	3.8	272	2 T18915	hypothetical prote
20	7	3.8	274	2 S27434	hypothetical prote
21	7	3.8	277	2 I47162	26S proteasome reg
22	7	3.8	292	2 T49261	Ig gamma 4 chain c
23	7	3.8	328	2 I47161	hypothetical prote
24	7	3.8	328	2 I47158	Ig gamma 3 chain c
25	7	3.8	328	2 I47160	Ig gamma 1 chain c
26	7	3.8	328	2 I47159	Ig gamma 2b chain
27	7	3.8	341	2 T51897	Ig gamma 2a chain
28	7	3.8	344	2 JS0571	related to sorbito
29	7	3.8	344	2 B39133	transcription acti
					lima protein - Pse

30	7	3.8	353	2 S36249	lipB protein - Pse
31	7	3.8	391	2 C87547	p-hydroxybenzoate
32	7	3.8	402	1 RERTK	renin (EC 3.4.23.1
33	7	3.8	475	2 A38340	66K glycoprotein p
34	7	3.8	476	2 T40330	hypothetical prote
35	7	3.8	624	2 A47222	Kallmann syndrome
36	7	3.8	676	2 B47222	Kallmann syndrome
37	7	3.8	682	2 AE0033	secretion system a
38	7	3.8	702	1 A48562	coat protein - San
39	7	3.8	716	2 S45262	NF-AT component -
40	7	3.8	718	2 JC5805	transcription fact
41	7	3.8	789	2 T09672	ent-kaurene syntha
42	7	3.8	791	2 AF2235	hypothetical prote
43	7	3.8	836	2 C82726	DNA uptake protein
44	7	3.8	863	2 D88465	protein B0244.7 [i
45	7	3.8	903	2 T00358	hypothetical prote
46	7	3.8	982	2 T06576	probable protein k
47	7	3.8	1008	2 T32986	hypothetical prote
48	7	3.8	1014	2 H86438	protein T19E23.7 [
49	7	3.8	1029	2 T05050	protein kinase hom
50	7	3.8	1329	2 C69048	cobalamin biosynth
51	7	3.8	1670	2 T06754	DNA-directed RNA p
52	7	3.8	1711	2 C71625	variant-specific s
53	7	3.8	2559	2 T09144	probable guanine n
54	7	3.8	2684	2 A96521	protein P21L8.22
55	6	3.3	58	2 AC1517	hypothetical prote
56	6	3.3	67	2 T11367	H-transferring tw
57	6	3.3	75	2 D61399	hypothetical early
58	6	3.3	76	1 W5WL58	E5 protein - human
59	6	3.3	82	2 F72276	conserved hypotet
60	6	3.3	82	2 AP3159	hypothetical prote
61	6	3.3	92	2 D72223	conserved hypotet
62	6	3.3	98	2 S78727	protein YLL018c-a
63	6	3.3	100	2 F72577	hypothetical prote
64	6	3.3	101	2 H71059	hypothetical prote
65	6	3.3	107	2 F71121	hypothetical prote
66	6	3.3	109	2 H82901	conserved hypotet
67	6	3.3	113	2 T10028	hypothetical prote
68	6	3.3	114	2 S48982	hypothetical prote
69	6	3.3	114	2 AI3204	rs66 family orf2 [
70	6	3.3	117	2 H71180	hypothetical prote
71	6	3.3	120	2 G33932	Ig kappa chain pre
72	6	3.3	125	2 F81226	lipoprotein, proba
73	6	3.3	129	1 WNV2P6	F6 protein - fowlp
74	6	3.3	130	2 C55546	flagellar protein
75	6	3.3	130	2 AD0745	flagellar protein
76	6	3.3	130	2 S57137	probable membrane
77	6	3.3	130	2 B95873	hypothetical prote
78	6	3.3	130	2 F70908	hypothetical prote
79	6	3.3	133	2 PS0023	Ig kappa chain pre
80	6	3.3	134	2 PC1214	Ig kappa chain pre
81	6	3.3	136	2 T07975	probable arabinoga
82	6	3.3	136	2 T07945	probable arabinoga
83	6	3.3	137	2 S75689	hypothetical prote
84	6	3.3	137	2 S26040	Ig kappa chain pre
85	6	3.3	138	2 S56851	probable membrane
86	6	3.3	138	2 C71176	hypothetical prote
87	6	3.3	141	1 QQVLC1	gene X protein - w
88	6	3.3	142	2 JC4997	hypothetical 15.7k
89	6	3.3	142	2 G84194	hypothetical prote
90	6	3.3	145	2 PL0014	Ig kappa chain pre
91	6	3.3	147	1 A58802	probable tumor sup
92	6	3.3	148	2 S42924	2G-1ep protein - z
93	6	3.3	149	2 S75733	hypothetical prote
94	6	3.3	149	2 H70581	hypothetical prote
95	6	3.3	153	2 T04614	hypothetical prote
96	6	3.3	154	2 D83768	bacterioferritin c
97	6	3.3	154	2 E72534	hypothetical prote
98	6	3.3	154	2 AI2580	conserved hypotet
99	6	3.3	154	2 G97362	hypothetical prote
100	6	3.3	155	2 F83341	hypothetical prote

ALIGNMENTS

RESULT 1

G70777
 Hypothetical protein Rv2235 - Mycobacterium tuberculosis (strain H37RV)
 C:Species: Mycobacterium tuberculosis
 C:Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 28-Jul-2000
 C:Accession: G70777
 R:Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Nature 393, 537-544, 1998
 A:Authors: Scares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
 A:Title: Deciphering the biology of Mycobacterium tuberculosis from the complete genome
 A:Reference number: A70500; MUID:98295987; PMID:9634230
 A:Accession: G70777
 A:Status: preliminary; nucleic acid sequence not shown; translation not shown
 A:Molecule type: DNA
 A:Residues: 1-271 <COL>
 A:Cross-references: GB:Z70692; GB:ML123456; NID:g3261567; PIDN:CAA94657.1; PID:g1261937
 A:Experimental source: strain H37RV
 C:Genetics:
 A:Gene: Rv2235
 C:Superfamily: Mycobacterium leprae hypothetical protein MLCB1243.32c

Query Match 4.4%; Score 8; DB 2; Length 271;
 Best Local Similarity 100.0%; Pred. No. 5.5;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 12 LRPQWLAL 19
 |||||
 DB 8 LRPQWLAL 15
 |||||
 RESULT 2
 E95057
 Na/Pi cotransporter II-related protein SP0496 [imported] - Streptococcus pneumoniae (strain H37RV)
 C:Species: Streptococcus pneumoniae
 C:Date: 03-Aug-2001 #sequence_revision 03-Aug-2001 #text_change 03-Aug-2001
 C:Accession: E95057
 R:Watt, H.; Nelson, K.E.; Paulsen, I.T.; Eisen, J.A.; Read, T.D.; Peterson, S.; Heid, J.; Umayam, L.A.; White, O.; Salzberg, S.L.; Lewis, M.R.; Radune, D.; Holtzapfel, J.; Hickey, E.K.; Holt, I.E. Science 293, 498-506, 2001
 A:Authors: Loftus, B.J.; Yang, F.; Smith, H.O.; Venter, J.C.; Dougherty, B.A.; Morrison, A.; Title: Complete Genome Sequence of a virulent isolate of Streptococcus pneumoniae.
 A:Reference number: A95000; MUID:21357209; PMID:11463916
 A:Accession: E95057
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-543 <KUR>
 A:Cross-references: GB:AE005672; PIDN:AAK74654.1; PID:g14371968; GSPDB:GN00164; TIGR:SP4
 A:Experimental source: strain TIGR4
 C:Genetics:
 A:Gene: SP0496

Query Match 4.4%; Score 8; DB 2; Length 543;
 Best Local Similarity 100.0%; Pred. No. 9.8;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 141 IERVLRKT 148
 |||||
 DB 492 IERVLRKT 499
 |||||

RESULT 3

G97926
 conserved hypothetical protein spr0439 [imported] - Streptococcus pneumoniae (strain R6)
 C:Species: Streptococcus pneumoniae
 C:Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 22-Oct-2001
 C:Accession: G97926
 R:Hoskins, J.A.; Alborn Jr., W.; Arnold, J.; Blaszcak, J.; Burgett, S.; DeHoff, B.S.; B

e, R.; LeBlanc, D.J.; Lee, L.N.; Lefkowitz, E.J.; Lu, J.; Matsushima, P.; McAhren, S.; Y, P.; Sun, P.M.; Winkler, M.E.
 J. Bacteriol. 183, 5709-5717, 2001
 A:Authors: Yang, Y.; Young-Bellido, M.; Zhao, G.; Zook, C.; Baltz, R.H.; Jaskunas, S.R.
 A:Title: Genome of the Bacterium Streptococcus pneumoniae Strain R6.
 A:Reference number: A97872; MUID:21429245; PMID:11544234
 A:Accession: G97926
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-543 <KUR>
 A:Cross-references: GB:AE007317; PIDN:AAK99243.1; PID:g15458006; GSPDB:GN00174
 C:Genetics:
 A:Gene: spr0439

Query Match 4.4%; Score 8; DB 2; Length 543;
 Best Local Similarity 100.0%; Pred. No. 9.8;
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 141 IERVLRKT 148
 |||||
 DB 492 IERVLRKT 499
 |||||

RESULT 4

S25343
 ORF5 protein - Yeast (Saccharomyces cerevisiae)
 N:Alternate names: protein L8167.17.a; protein YLR204w
 C:Species: Saccharomyces cerevisiae
 C:Date: 12-Mar-1993 #sequence_revision 12-Mar-1993 #text_change 20-Sep-1999
 C:Accession: S25343; S48555
 R:Simon, M.; della Seta, F.; Sor, F.; Faye, G. Yeast 8, 559-567, 1992
 A:Title: Analysis of the MSS51 region on chromosome XII of Saccharomyces cerevisiae.
 A:Reference number: S25342; MUID:92397593; PMID:1523888
 A:Accession: S25343
 A:Status: not compared with conceptual translation
 A:Molecule type: DNA
 A:Residues: 1-111 <STM>
 A:Cross-references: GB:S43721; NID:g255246; PIDN:AA823217.1; PID:g255248
 R:Pauley, A. submitted to the EMBL Data Library, September 1994
 A:Description: The sequence of S. cerevisiae cosmid 8167.
 A:Reference number: S48545
 A:Accession: S48555
 A:Molecule type: DNA
 A:Residues: 1-111 <PAU>
 A:Cross-references: EMBL:U14913; NID:g544497; PID:g544504; MIPS:YLR204w
 C:Genetics:
 A:Gene: SGD:QRI5
 A:Cross-references: SGD:S0004194; MIPS:YLR204w
 A:Map position: 12R
 C:Superfamily: Saccharomyces QRI5 protein

Query Match 3.8%; Score 7; DB 2; Length 111;
 Best Local Similarity 100.0%; Pred. No. 26;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 11 ALRPGWL 17
 |||||
 DB 5 ALRPGWL 11
 |||||

RESULT 5

G72609
 hypothetical protein APE1341 - Aeropyrum pernix (strain K1)
 C:Species: Aeropyrum pernix
 C:Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 20-Aug-1999
 C:Accession: G72609
 R:Kawarayashi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; Takai, A.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; DNA Res. 6, 83-101, 1999
 A:Title: Complete genome sequence of an aerobic hyper-thermophilic crenarchaeon, Aeropyrum pernix strain K1.
 A:Reference number: A72450; MUID:99310339; PMID:10382966

A:Accession: G72609
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-130 <KAW>
A:Cross-references: DDBJ:AP000061; NID:95104821; PID:BAA80333.1; PID:d1044119; PID:gs10
A:Experimental source: strain K1
C:Genetics:
A:Gene: APE1341

Query Match 3.8%; Score 7; DB 2; Length 130;
Best Local Similarity 100.0%; Pred. No. 29;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||
DB 50 ASSLSL 56

RESULT 6

F96779
probable ribosomal protein S9 F9B13.17 [imported] - Arabidopsis thaliana
C:Species: Arabidopsis thaliana (mouse-ear cress)
C>Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
C:Accession: F96779
R:Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso,
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Creasy, T.H.; Dewar, K.;
ansen, N.F.; Hughes, B.; Huizar, L.
Nature 408, 816-820, 2000
A:Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.
C.A.; Li, J.H.; Li, Y.; Liu, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali,
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A:Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon,
Ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A:Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A:Reference number: A86141; MUID:21016719; PMID:11130712
A:Accession: F96779
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-132 <STO>
A:Cross-references: GB:AR005173; NID:96646766; PID:AAF21078.1; GSPDB:GN00141
C:Genetics:
A:Gene: F9E10.17
A:Map position: 1

Query Match 3.8%; Score 7; DB 2; Length 132;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||
DB 8 ASSLSL 14

RESULT 7

S76142
hypothetical protein - Synecocystis sp. (strain PCC 6803)
C:Species: Synecocystis sp.
A:Variety: PCC 6803
C>Date: 25-Apr-1997 #sequence_revision 25-Apr-1997 #text_change 08-Oct-1999
C:Accession: S76142
R:Kaneko, T.; Sato, S.; Kotani, H.; Tanaka, A.; Asamizu, E.; Nakamura, Y.; Miyajima, N.;
O. K.; Okumura, S.; Shimpo, S.; Takeuchi, C.; Wada, T.; Watanabe, A.; Yamada, M.; Yasuda
DNA Res. 3, 109-136, 1996
A:Title: Sequence analysis of the genome of the unicellular cyanobacterium Synecocystis
s.
A:Reference number: S74322; MUID:97061201; PMID:8905231
A:Accession: S76142
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-147 <KAN>
A:Cross-references: EMBL:D90914; GB:AB001339; NID:91653477; PID:BAAL9401.1; PID:d101913
A>Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996

Query Match 3.8%; Score 7; DB 2; Length 147;
Best Local Similarity 100.0%; Pred. No. 32;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 PGWLALL 20
|||
DB 110 PGWLALL 116

RESULT 8

S53555
probable membrane protein YER148w-a - yeast (Saccharomyces cerevisiae)
C:Species: Saccharomyces cerevisiae
C>Date: 06-May-1995 #sequence_revision 01-Dec-1995 #text_change 23-Mar-2001
C:Accession: S53555
R:Dietrich, F.S.
submitted to the EMBL Data Library, December 1994
A:Description: The sequence of S. cerevisiae cosmid 8229, 9115, 9132, 9981, and lamb
A:Reference number: S50430
A:Accession: S53555
A:Molecule type: DNA
A:Residues: 1-192 <DIE>
A:Cross-references: EMBL:U18917; GSPDB:GN00005; MIPS:YER148w-a
C:Genetics:
A:Gene: MIPS:YER148w-a
A:Map position: 5R
C:Superfamily: Saccharomyces cerevisiae probable membrane protein YER148w-a
C:Keywords: transmembrane protein
F:51-67/Domain: transmembrane #status predicted <TM1>
F:102-118/Domain: transmembrane #status predicted <TM2>

Query Match 3.8%; Score 7; DB 2; Length 192;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||
DB 32 ASSLSL 38

RESULT 9

T52450
ribosomal protein S9 [imported] - Arabidopsis thaliana
C:Species: Arabidopsis thaliana (mouse-ear cress)
C>Date: 24-Oct-2000 #sequence_revision 24-Oct-2000 #text_change 24-Oct-2000
C:Accession: T52450
R:Arimura, S.; Takusagawa, S.; Hatanaka, S.; Nakazono, M.; Hirai, A.; Tsutsumi, N.
FEBS Lett. 450, 231-234, 1999
A:Title: A novel plant nuclear gene encoding chloroplast ribosomal protein S9 has a t:
A:Reference number: Z26079
A:Accession: T52450
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-208 <ARI>
A:Cross-references: EMBL:AB022676; PIDN:BAAB2396.1
C:Genetics:
A:Gene: rps9

Query Match 3.8%; Score 7; DB 2; Length 208;
Best Local Similarity 100.0%; Pred. No. 43;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
|||
DB 8 ASSLSL 14

RESULT 10

A75406
hydro-lase - Deinococcus radiodurans (strain R1)
C:Species: Deinococcus radiodurans
C>Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 17-Mar-2000
C:Accession: A75406

A:Molecule type: DNA
A:Residues: 1-251 <KUR>
A:Cross-references: GB:AE008917; PIDN:AAL51683.1; PID:gl7982415; GSPDB:GN00190
A:Experimental source: strain 16M
C:Genetics:
A:Gene: BMEI0502
A:Map position: 1

Query Match 3.8%; Score 7; DB 2; Length 251;
Best Local Similarity 100.0%; Pred. No. 51;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 90 PDSLLS 96
|||||
DB 201 PDSLLS 207

RESULT 13
AD0615
probable membrane protein STY0992 [imported] - Salmonella enterica subsp. enterica ser
C:Species: Salmonella enterica subsp. enterica serovar Typhi
A:Title: Complete genome sequence of a multiple drug resistant Salmonella typhi
C:Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 18-Nov-2002
C:Accession: AD0615
R:Parkhill, J.; Dougan, G.; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; Church
th, T.; Cornerton, P.; Cronin, A.; Davis, P.; Davies, R.M.; Dowd, L.; White, N.; Farra
, S.; Moule, S.; O'Gaora, P.
Nature 413, 848-852, 2001
A:Authors: Parkhill, J.; Dougan, G.; James, K.D.; Thomson, N.R.; Pickard, D.; Wain, J.; Church
A:Title: Complete genome sequence of a multiple drug resistant Salmonella typhi
A:Reference number: AB0502; MUID:21534947; PMID:11677608
A:Accession: AD0615
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-258 <PAR>
A:Cross-references: GB:AL513382; PIDN:CAD05390.1; PID:gl6502152; GSPDB:GN00176
C:Genetics:
A:Gene: STY0992
C:Superfamily: conserved hypothetical protein aq_1986

Query Match 3.8%; Score 7; DB 2; Length 258;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
|||||
DB 46 GWLALLL 52

RESULT 14
G64831
probable membrane protein ybcC - Escherichia coli (strain K-12)
C:Species: Escherichia coli
C:Date: 12-Sep-1997 #sequence_revision 17-Sep-1997 #text_change 01-Mar-2002
R:Plattner, P.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, V.; Riley, M.;
A.; Rose, D.J.; Mau, B.; Shao, Y.
Science 277, 1453-1462, 1997
A:Title: The complete genome sequence of Escherichia coli K-12.
A:Reference number: A64720; MUID:97426617; PMID:9278503
A:Accession: G64831
A:Status: nucleic acid sequence not shown; translation not shown
A:Molecule type: DNA
A:Residues: 1-259 <BLAT>
A:Cross-references: GB:AB000194; GB:U00096; NID:gl787148; PIDN:AAC74006.1; PID:gl787
A:Experimental source: strain K-12, substrain MGL655
C:Genetics:
A:Gene: ybcC
C:Superfamily: conserved hypothetical protein aq_1986
C:Keywords: transmembrane protein
F:13-29/Domain: transmembrane #status predicted <TM1>
F:39-55/Domain: transmembrane #status predicted <TM2>

R:White, O.; Eisen, J.A.; Reidelberg, J.P.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.; Ma
S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
A:Title: Genome sequence of the radiocresistant bacterium Deinococcus radiodurans R1.
A:Reference number: A75250; MUID:20036896; PMID:10567266
A:Accession: A75406
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-222 <CHI>
A:Cross-references: GB:AE001981; GB:AE000513; NID:g6459097; PIDN:AAF10916.1; PID:g645909
A:Experimental source: strain R1
C:Genetics:
A:Gene: DR1344
A:Map position: 1
C:Superfamily: Alcaligenes eutrophus phosphoglycolate phosphatase

Query Match 3.8%; Score 7; DB 2; Length 222;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
DB 85 LGPEAAA 91

RESULT 11
S16267
auxin-induced protein (clones pGNT1 and pCNT110) - common tobacco
C:Species: Nicotiana tabacum (common tobacco)
C:Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 24-Sep-1999
C:Accession: S16267; S16270
R:van der Zaai, E.J.; Droog, F.N.J.; Boot, C.J.M.; Hensgens, L.A.M.; Hoge, J.H.C.; Schil
Plant Mol. Biol. 16, 983-998, 1991
A:Title: Promoters of auxin-induced genes from tobacco can lead to auxin-inducible and
A:Reference number: S16267; MUID:91322513; PMID:1863770
A:Accession: S16267
A:Molecule type: DNA
A:Residues: 1-223 <ZAA>
A:Cross-references: EMBL:X56268; NID:gl9788; PIDN:CAA39709.1; PID:gl9789
A:Experimental source: cultivar Samsun NN; tissue leaf; clone pGNT1
A:Accession: S16270
A:Molecule type: mRNA
A:Residues: 1-223 <ZAA>
A:Cross-references: EMBL:X56264; NID:gl9794; PIDN:CAA39705.1; PID:gl9795
A:Experimental source: cultivar White Burley; clone pCNT110
C:Genetics:
A:Introns: 103/3
A:Superfamily: auxin-induced protein
C:Keywords: auxin regulation

Query Match 3.8%; Score 7; DB 2; Length 223;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 131 ASASAPK 137
|||||
DB 217 ASASAPK 223

RESULT 12
AH3314
hypothetical membrane spanning protein BMEI0502 [imported] - Brucella melitensis (strain
C:Species: Brucella melitensis
C:Date: 01-Feb-2002 #sequence_revision 01-Feb-2002 #text_change 01-Feb-2002
C:Accession: AH3314
R:DelVecchio, V.G.; Kapral, V.; Redkar, R.J.; Patra, G.; Mijer, C.; Los, T.; Ivanova,
; Mazur, M.; Goldsman, E.; Selkov, E.; Elzer, P.H.; Hagius, S.; O'Callaghan, D.; Letess
proc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002
A:Title: The genome sequence of the facultative intracellular pathogen Brucella melitens
A:Reference number: AD3252; PMID:11756688
A:Accession: AH3314
A:Status: preliminary

Query Match 3.8%; Score 7; DB 2; Length 259;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 46 GWLALLL 52

RESULT 15
C90754
hypothetical protein Ecs1003 [imported] - Escherichia coli (strain O157:H7, substrain R118915)
C:Species: Escherichia coli
C>Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 03-Aug-2001
C:Accession: C90754
R:Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.-G.; Gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H.
DNA Res. 8, 11-22, 2001
A:Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and genome organization
A:Reference number: A99629; MUID:21156231; PMID:11258796
A:Accession: C90754
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-259 <HAV>
A:Cross-references: GB:BA000007; PIDN:BA834426.1; PID:gl3360452; GSPDB:GN00154
A:Experimental source: strain O157:H7, substrain R118915
C:Genetics:
A:Gene: Ecs1003
C:Superfamily: conserved hypothetical protein aq_1986

Query Match 3.8%; Score 7; DB 2; Length 259;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 46 GWLALLL 52

RESULT 16
A85618
hypothetical protein ybcC [imported] - Escherichia coli (strain O157:H7, substrain EDL933)
C:Species: Escherichia coli
C>Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 14-Sep-2001
C:Accession: A85618
R:Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D.J.; Mayhew
Miller, L.; Grotbeck, E.J.; Davis, N.M.; Lim, A.; Dimalanta, E.; Potamousis, K.; Apodaca,
Nature 409, 523-533, 2001
A:Title: Genome sequence of enterohemorrhagic Escherichia coli O157:H7.
A:Reference number: A85480; MUID:21074935; PMID:11206551
A:Accession: A85618
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-259 <STO>
A:Cross-references: GB:AB005174; NID:gl2514089; PIDN:AAG55405.1; GSPDB:GN00145; UWGP:212
A:Experimental source: strain O157:H7, substrain EDL933
C:Genetics:
A:Gene: ybcC
C:Superfamily: conserved hypothetical protein aq_1986

Query Match 3.8%; Score 7; DB 2; Length 259;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 46 GWLALLL 52

RESULT 17
H82387
glucosamine-6-phosphate isomerase VCA1025 [imported] - Vibrio cholerae (strain N16961 se
C:Species: Vibrio cholerae

Query Match 3.8%; Score 7; DB 2; Length 266;
Best Local Similarity 100.0%; Pred. No. 53;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 149 PASSLSS 155

RESULT 18
F64050
glucosamine-6-phosphate deaminase [EC 3.5.99.6] - Haemophilus influenzae (strain Rd KW2
C:Species: Haemophilus influenzae
C>Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 28-Jul-2003
C:Accession: F64050
R:Flieschmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage,
; Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman,
D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M.
Science 269, 496-512, 1995
A:Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Venter,
A:Title: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd.
A:Reference number: A64000; MUID:95350630; PMID:7542800
A:Accession: F64050
A:Status: nucleic acid sequence not shown; translation not shown
A:Molecule type: DNA
A:Residues: 1-270 <TIGR>
A:Cross-references: GB:U32700; GB:I42023; NID:g3212181; PIDN:AAC21813.1; PID:gl573097;
C:Superfamily: glucosamine-6-phosphate isomerase
C:Keywords: hydrolase; isomerase

Query Match 3.8%; Score 7; DB 2; Length 270;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 149 PASSLSS 155

RESULT 19
Ti8915
hypothetical protein C04F12.8 - Caenorhabditis elegans
C:Species: Caenorhabditis elegans
C>Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C:Accession: Ti8915
R:Lloyd, C.
submitted to the EMBL Data Library, November 1996
A:Reference number: Z19044
A:Accession: Ti8915
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-272 <WIL>
A:Cross-references: EMBL:Z81461; PIDN:CAB03837.1; GSPDB:GN00019; CESP:C04F12.8
A:Experimental source: Clone C04F12

C:Superfamily: immunoglobulin C region; immunoglobulin homology
F:133-202/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 328;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 72 PASSLSS 78

RESULT 24

I47158

Ig gamma 1 chain constant region - pig (fragment)

C:Species: Sus scrofa domestica (domestic pig)

C:Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000

C:Accession: I47158

R:Kaczkovics, I.; Sun, J.; Butler, J.E.

J. Immunol. 153, 3565-3573, 1994

A:Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a

A:Reference number: I47158; MUID:95015845; PMID:7930579

A:Accession: I47158

A:Status: preliminary; translated from GB/EMBL/DDBJ

A:Molecule type: mRNA

A:Residues: 1-328 <KAC>

A:Cross-references: EMBL:U03778; NID:G433121; PIDN:AAA52216.1; PID:G433122

C:Genetics:

A:Gene: Igg1

C:Superfamily: immunoglobulin C region; immunoglobulin homology

F:133-202/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 328;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 72 PASSLSS 78

RESULT 25

I47160

Ig gamma 2b chain constant region - pig (fragment)

C:Species: Sus scrofa domestica (domestic pig)

C:Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000

C:Accession: I47160

R:Kaczkovics, I.; Sun, J.; Butler, J.E.

J. Immunol. 153, 3565-3573, 1994

A:Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a

A:Reference number: I47158; MUID:95015845; PMID:7930579

A:Accession: I47160

A:Status: preliminary; translated from GB/EMBL/DDBJ

A:Molecule type: mRNA

A:Residues: 1-328 <KAC>

A:Cross-references: EMBL:U03780; NID:G433125; PIDN:AAA52218.1; PID:G433126

C:Genetics:

A:Gene: Igg2b

C:Superfamily: immunoglobulin C region; immunoglobulin homology

F:133-202/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 328;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 72 PASSLSS 78

RESULT 26

I47159

Ig gamma 2a chain constant region - pig (fragment)

C:Species: Sus scrofa domestica (domestic pig)
C:Date: 21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change 21-Jan-2000
C:Accession: I47159

R:Kaczkovics, I.; Sun, J.; Butler, J.E.

J. Immunol. 153, 3565-3573, 1994

A:Title: Five putative subclasses of swine IgG identified from the cDNA sequences of a
A:Reference number: I47158; MUID:95015845; PMID:7930579

A:Accession: I47159

A:Status: preliminary; translated from GB/EMBL/DDBJ

A:Molecule type: mRNA

A:Residues: 1-328 <KAC>

A:Cross-references: EMBL:U03779; NID:G433123; PIDN:AAA52217.1; PID:G433124

C:Genetics:

A:Gene: Igg2a

C:Superfamily: immunoglobulin C region; immunoglobulin homology

F:133-202/Domain: immunoglobulin homology <IMM>

Query Match 3.8%; Score 7; DB 2; Length 328;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
DB 72 PASSLSS 78

RESULT 27

T51897

related to sorbitol utilization protein soul [imported] - Neurospora crassa
N:Alternate names: protein B23111.90

C:Species: Neurospora crassa

C:Date: 20-Oct-2000 #sequence_revision 20-Oct-2000 #text_change 20-Oct-2000

C:Accession: T51897

R:Schulte, U.; Align, V.; Hobeisel, J.; Brandt, P.; Fartmann, B.; Holland, R.; Nyakatura

submitted to the Protein Sequence Database, August 2000

A:Reference number: Z25858

A:Accession: T51897

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-341 <SCH>

A:Cross-references: EMBL:AL391572; GSPDB:GMS0116; NCSP:B23111.90

A:Experimental source: BAC clone B23111; strain OR74A

C:Genetics:

A:Gene: NCSP:B23111.90

A:Map position: 6

A:Introns: 208/2; 233/3; 307/1

Query Match 3.8%; Score 7; DB 2; Length 341;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 SSLSLV 41
DB 57 SSLSLV 63

RESULT 28

JS0571

transcription activator of lipase act - Pseudomonas sp.

C:Species: Pseudomonas sp.

C:Date: 23-Nov-1991 #sequence_revision 23-Nov-1991 #text_change 21-Jul-2000

C:Accession: JQ1228; JS0571

R:izumi, T.; Kakamura, K.; Shimada, Y.; Sugihara, A.; Tominaga, Y.; Fukase, T.

Agric. Biol. Chem. 55, 2349-2357, 1991

A:Title: Cloning, nucleotide sequencing, and expression in Escherichia coli of a lipase

A:Reference number: JT0579; MUID:92118328; PMID:1368739

A:Accession: JQ1228

A:Molecule type: DNA

A:Residues: 1-344 <IIZ>

A:Cross-references: GB:D10069; GB:D01216; NID:9216898; PIDN:BAA00961.1; PID:9216900

A:Note: the codons GTG for 15-, 20-, 28-, 51-, 64- and 96-Val and ATG for 1- and 30-Met

A:Note: the DNA sequence encoding this protein has eight possible translational start c

C:Comment: The gene encoding for this protein is located at downstream of lip gene.

C;Genetics:
A;Gene: act

Query Match 3.8%; Score 7; DB 2; Length 344;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 270 LGPEAAA 276

RESULT 29

B39133
linA protein - Pseudomonas cepacia
C;Species: Pseudomonas cepacia
C;Date: 27-Nov-1991 #sequence_revision 27-Nov-1991 #text_change 08-Oct-1999
C;Accession: B39133
R;Jorgensen, S.; Skov, K.W.; Diderichsen, B.
J. Bacteriol. 173, 559-567, 1991
A;Title: Cloning, sequence, and expression of a lipase gene from Pseudomonas cepacia: liA
A;Reference number: A39133; MUID:91100343; PMID:1987151
A;Accession: B39133
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-344 <JOR>
A;Cross-references: GB:M58494; NID:G557866; PIDN:AAA50467.1; PID:G151338

Query Match 3.8%; Score 7; DB 2; Length 344;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 270 LGPEAAA 276

RESULT 30

S36249
lipB protein - Pseudomonas glumae
C;Species: Pseudomonas glumae
C;Date: 15-Oct-1994 #sequence_revision 15-Oct-1994 #text_change 08-Oct-1999
C;Accession: S36249
R;Frenken, L.G.J.; Bos, J.W.; Visser, C.; Mueller, W.; Tommassen, J.; Verrips, C.T.
Mol. Microbiol. 9, 579-589, 1993
A;Title: An accessory gene, lipB, required for the production of active Pseudomonas glum
A;Reference number: S36248; MUID:94018652; PMID:8412704
A;Accession: S36249
A;Molecule type: DNA
A;Residues: 1-353 <FRE>
A;Cross-references: EMBL:X70354; NID:G49205; PIDN:CAA49813.1; PID:G49207

C;Genetics:
A;Gene: lipB

C;Keywords: transmembrane protein
F;19-40/Domain: transmembrane #status predicted <TM>
Query Match 3.8%; Score 7; DB 2; Length 353;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 281 LGPEAAA 287

RESULT 31

C87547
D-hydroxybenzoate hydroxylase [imported] - Caulobacter crescentus
C;Species: Caulobacter crescentus
C;Date: 20-Apr-2001 #sequence_revision 20-Apr-2001 #text_change 10-May-2001
C;Accession: C87547
R;Nierman, W.C.; Feldblyum, T.V.; Paulsen, I.T.; Nelson, K.E.; Eisen, J.; Heidelberg, J.
B.; Laub, M.T.; DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; Haft, D.H.; Kolon

n, J.; Ermolaeva, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.I.
Proc. Natl. Acad. Sci. U.S.A. 98, 4136-4141, 2001
A;Title: Complete Genome Sequence of Caulobacter crescentus.
A;Reference number: AB7249; MUID:21173698; PMID:11259647
A;Accession: C87547
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-391 <STO>
A;Cross-references: GB:AE005673; NID:G13423943; PIDN:AAK24375.1; GSFDDB:GN00148
C;Genetics:
A;Gene: CC2404
C;Superfamily: 4-hydroxybenzoate 3-monoxygenase

Query Match 3.8%; Score 7; DB 2; Length 391;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11
|||||
Db 247 LGPEAAA 253

RESULT 32

RERTK
renin (EC 3.4.23.15) precursor - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 18-Jun-1999
C;Accession: A29991; S02093; S02090; A32702; A60837
R;Fukamizu, A.; Nishi, K.; Cho, T.; Saitoh, M.; Nakayama, K.; Ohkubo, H.; Nakarishi, S.
J. Mol. Biol. 201, 443-450, 1988
A;Title: Structure of the rat renin gene.
A;Reference number: A29991; MUID:38332979; PMID:3047403
A;Accession: A29991
A;Molecule type: DNA
A;Residues: 1-402 <FUK>
A;Cross-references: GB:X07907
R;Tada, M.; Fukamizu, A.; Seo, M.S.; Takahashi, S.; Murakami, K.
Nucleic Acids Res. 16, 3576, 1988
A;Title: Nucleotide sequence of rat renin cDNA.
A;Reference number: S00923; MUID:88233945; PMID:3287330
A;Accession: S00923
A;Molecule type: mRNA
A;Residues: 1-402 <TAD>
A;Cross-references: EMBL:X07033
A;Note: the authors translated the codon AAA for residue 98 as Leu
R;Murakami, K.
submitted to the EMBL Data Library, March 1988
A;Reference number: S02090
A;Accession: S02090
A;Molecule type: mRNA
A;Residues: 1-199, 'V', 'V', '201-270, 'L', '272-402 <MUR>
A;Cross-references: EMBL:X07033; NID:G57045; PIDN:CAA30082.1; PID:G57046
R;Burnham, C.E.; Hawelu-Johnson, C.L.; Frank, B.M.; Lynch, K.R.
Proc. Natl. Acad. Sci. U.S.A. 84, 5605-5609, 1987
A;Title: Molecular cloning of rat renin cDNA and its gene.
A;Reference number: A32702; MUID:87289653; PMID:3039496
A;Accession: A32702
A;Molecule type: mRNA
A;Residues: 1-402 <HUR>
A;Cross-references: GB:J02941
R;Makrides, S.C.; Mulinari, R.; Zannis, V.I.; Gavras, H.
Hypertension 12, 405-410, 1988
A;Title: Regulation of renin gene expression in hypertensive rats.
A;Reference number: A60837; MUID:89007008; PMID:3049341
A;Accession: A60837
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 308-402 <MAX>
R;Kim, S.; Hosoi, M.; Kikuchi, N.; Yamamoto, K.
J. Biol. Chem. 266, 7044-7050, 1991
A;Title: Amino-terminal amino acid sequence and heterogeneity in glycosylation of rat
A;Reference number: A39772; MUID:91201358; PMID:2016314
A;Contents: annotation; processing sites

C:Genetics:

A:Introns: 31/2; 81/3; 123/1; 162/3; 228/2; 268/2; 316/3; 349/3
 C:Superfamily: pepsin
 C:Keywords: aspartic proteinase; blood pressure control; glycoprotein; hydrolase; kidney
 F:1-21/Domain: signal sequence #status predicted <SIG>
 F:22-71/Domain: propeptide #status predicted <PRO>
 F:72-352/Product: renin heavy chain #status experimental <MATH>
 F:355-402/Product: renin light chain #status experimental <MATH>
 F:69,139,320/Binding site: carboxylate (Asn) (covalent) #status predicted
 F:102,287/Active site: Asp #status predicted
 F:115-122,278-282,321-358/Disulfide bonds: #status predicted

Query Match 3.8%; Score 7; DB 1; Length 402;

Best Local Similarity 100.0%; Pred. No. 75;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 27 SCSFSLP 33

DB 17 SCSFSLP 23

RESULT 33

A38340
 66K glycoprotein precursor - rabbit

C:Species: Oryctolagus cuniculus (domestic rabbit)

C>Date: 28-Jun-1991 #sequence_revision 28-Jun-1991 #text_change 20-Aug-1999

A:Accession: A38340

R:Sato, R.; Komine, Y.; Imanaka, T.; Takano, T.

J. Biol. Chem. 265, 21232-21236, 1990

A:Title: Monoclonal antibody EMRIA/212D recognizing site of deposition of extracellular

A:Reference number: A38340; MUID:91065939; PMID:1701177

A:Accession: A38340

A:Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-475 <SAT>

A:Cross-references: GB:M55442; GB:J05688; NID:gl65037; PIDN:AAA31258.1; PID:gl65038

C:Superfamily: vitronectin; hemoexin repeat homology; somatomedin B homology

C:Keywords: glycoprotein

F:20-62/Domain: somatomedin B homology <SBH>

F:288-469/Domain: hemoexin repeat homology <PX2>

Query Match 3.8%; Score 7; DB 2; Length 475;

Best Local Similarity 100.0%; Pred. No. 86;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLLVV 23

DB 10 LALLLVV 16

RESULT 34

T40330

Hypothetical protein SPBC3B8.10c - fission yeast (Schizosaccharomyces pombe)

C:Species: Schizosaccharomyces pombe

C>Date: 33-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 03-Dec-1999

C:Accession: T40330

R:Lyne, M.; Rajandream, M.A.; Barrell, B.G.; Beck, A.; Reinhardt, R.; Pohl, T.

submitted to the EMBL Data Library, March 1998

A:Reference number: Z21921

A:Accession: T40330

A:Status: preliminary; translated from GB/EMBL/DDBJ

A:Molecule type: DNA

A:Residues: 1-476 <LYN>

A:Cross-references: EMBL:AL022244; PIDN:CAA18299.1; GSPDB:GN00067; SPDB:SPBC3B8.10c

C:Experimental source: strain 972h-; cosmid c3B8

C:Genetics:

A:Gene: SPDB:SPBC3B8.10c

A:Map position: 2

Query Match

Best Local Similarity 3.8%; Score 7; DB 2; Length 476;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40

DB 54 ASSLSL 60

RESULT 35

A47222

Kallmann syndrome protein homolog KAL - quail

C:Species: Phasianidae gen. sp. (quail)

C>Date: 24-Feb-1994 #sequence_revision 25-Apr-1997 #text_change 19-Feb-1999

C:Accession: A47222

R:Legouis, R.; Cohen-Salmon, M.; del Castillo, I.; Levilliers, J.; Capy, L.; Mornow, J.

Genomics 17, 516-518, 1993

A:Title: Characterization of the chicken and quail homologues of the human gene respons

A:Reference number: A47222; MUID:94010957; PMID:8406507

A:Accession: A47222

A:Status: preliminary; not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-674 <LEG>

A:Cross-references: GB:113976; NID:gl196807; PID:gl196808

A:Note: sequence extracted from NCBI backbone (NCBIP:137995)

A:Note: the species of quail is not identified

C:Superfamily: antileukoproteinase repeat homology

F:124-170/Domain: antileukoproteinase repeat homology <ALP>

Query Match

Best Local Similarity 3.8%; Score 7; DB 2; Length 674;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLLVV 23

DB 10 LALLLVV 16

RESULT 36

B47222

Kallmann syndrome protein homolog KAL - chicken

C:Species: Gallus gallus (chicken)

C>Date: 24-Feb-1994 #sequence_revision 18-Nov-1994 #text_change 01-Dec-2000

C:Accession: B47222; A47394; S36170

R:Legouis, R.; Cohen-Salmon, M.; del Castillo, I.; Levilliers, J.; Capy, L.; Mornow, J.

Genomics 17, 516-518, 1993

A:Title: Characterization of the chicken and quail homologues of the human gene respons

A:Reference number: A47222; MUID:94010957; PMID:8406507

A:Accession: B47222

A:Status: preliminary; not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-676 <LEG>

A:Cross-references: GB:112144; NID:9406510; PIDN:AAA51435.1; PID:9406511

A:Note: sequence extracted from NCBI backbone (NCBIP:137996)

R:Legouis, R.; Lievre, C.A.; Leibovici, M.; Lapointe, F.; Patit, C.

Proc. Natl. Acad. Sci. U.S.A. 90, 2461-2465, 1993

A:Title: Expression of the KAL gene in multiple neuronal sites during chicken developme

A:Reference number: A47394; MUID:93211981; PMID:8460158

A:Accession: A47394

A:Status: preliminary

A:Molecule type: mRNA

A:Residues: 81-152, 'P', 154-237 <LE2>

A:Experimental source: embryo, olfactory bulb

A:Note: sequence extracted from NCBI backbone (NCBIN:128286, NCBIP:128287)

R:Rugarli, E.I.; Lutz, B.; Kuratani, S.C.; Wawersik, S.; Borsani, G.; Ballabio, A.; Eic

Nature Genet. 4, 19-26, 1993

A:Title: Expression pattern of the Kallmann syndrome gene in the olfactory system sugge

A:Reference number: S36170; MUID:93291868; PMID:8513320

A:Accession: S36170

A:Status: preliminary

A:Molecule type: mRNA

A:Residues: 'MVR', 5-528, 'H', 530-676 <RUG>

C:Superfamily: antileukoproteinase repeat homology

F:125-171/Domain: antileukoproteinase repeat homology <ALP>

Query Match

Best Local Similarity 3.8%; Score 7; DB 2; Length 676;

Matches 7; Conservative 100.0%; Pred. No. 1.2e+02;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLMW 23
 |||||
Db 11 LALLMW 17

RESULT 37
AE0033
secretion system apparatus protein [imported] - Yersinia pestis (strain CO92)
C:Species: Yersinia pestis
C>Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Nov-2001
C:Accession: AE0033
R:Farthill, J.; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B.;
deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.;
il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell,
Nature 413, 523-527, 2001
A>Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A:Reference number: AB0001; MUID:21470413; PMID:11596360
A:Accession: AE0033
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-682 <KUR>
A:Cross-references: GB:AL590842; P:DN:CAC89128.1; PID:g15978366; GSPDB:GN00175
C:Genetics:
C:Superfamily: regulatory protein lcrD

Query Match 3.8%; Score 7; DB 2; Length 682;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 89 LPPDSL 95
 |||||
Db 417 LPPDSL 423

RESULT 38
A48562
coat protein - San Miguel sea lion virus (serotype 1)
N:Alternate names: capsid protein
C:Species: San Miguel sea lion virus
C>Date: 17-Feb-1994 #sequence_revision 17-Feb-1994 #text_change 23-Jul-1999
C:Accession: A48562
R:Neill, J.D.
Virus Res. 24, 211-222, 1992
A>Title: Nucleotide sequence of the capsid protein gene of two serotypes of San Miguel
eids.
A:Reference number: A48562; MUID:92410750; PMID:1529644
A:Accession: A48562
A:Molecule type: genomic RNA
A:Residues: 1-702 <NEI>
A:Cross-references: GB:M87481; NID:g334882; PIDN:AAA16217.1; PID:g334884
A>Note: sequence extracted from NCBI backbone (NCBIN:113564, NCBIP:113565)
C:Superfamily: feline calicivirus coat protein
C:Keywords: capsid protein; coat protein; glycoprotein
F:208,481,493,545/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 3.8%; Score 7; DB 1; Length 702;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 89 LPPDSL 95
 |||||
Db 635 LPPDSL 641

RESULT 39
S45262
NF-AT component - human
C:Species: Homo sapiens (man)
C>Date: 10-Dec-1994 #sequence_revision 10-Nov-1995 #text_change 28-May-1999
C:Accession: S45262

R:Northrop, J.P.; Ho, S.N.; Chen, L.; Thomas, D.J.; Timmerman, L.A.; Nolan, G.P.; Admon;
Nature 369, 497-502, 1994
A>Title: NF-AT components define a family of transcription factors targeted in T-cell;
A:Reference number: S45262; MUID:94261186; PMID:8202141
A:Accession: S45262
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-716 <NOR>
A:Cross-references: GB:U08015; NID:g500631; PIDN:AAA19601.1; PID:g500632

Query Match 3.8%; Score 7; DB 2; Length 716;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
 |||||
Db 173 PASSLSS 179

RESULT 40
JC5805
transcription factor NFATC - mouse
C:Species: Mus musculus (house mouse)
C>Date: 27-Jan-1998 #sequence_revision 13-Mar-1998 #text_change 07-May-1999
C:Accession: JC5805
R:Pan, S.; Koyano-Nakagawa, N.; Tsuruta, L.; Anasaki, Y.; Yokota, T.; Mori, S.; Arai, I;
Biochem. Biophys. Res. Commun. 240, 314-323, 1997
A>Title: Molecular cloning and functional characterization of murine cDNA encoding tra
A:Reference number: JC5805; MUID:98049829; PMID:9388475
A:Accession: JC5805
A:Molecule type: mRNA
A:Residues: 1-718 <PAN>
A>Note: the sequences of residues 30-39 and 40-59 are interchanged in the authors' tra
C:Comment: This protein plays a role in immune and inflammatory response by regulating
F:202-211,236-245,281-290/Region: SP-box
F:684-687/Region: nuclear location signal

Query Match 3.8%; Score 7; DB 2; Length 718;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
 |||||
Db 176 PASSLSS 182

RESULT 41
T09672
ent-kaurene synthase B (EC 2.5.1.-) - winter squash
C:Species: Cucurbita maxima (winter squash)
C>Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 21-Jul-2000
C:Accession: T09672
R:Yamaguchi, S.; Saito, T.; Abe, H.; Yamane, H.; Marufushi, N.; Kamiya, Y.
Plant J. 10, 203-213, 1996
A>Title: Molecular cloning and characterization of a cDNA encoding the gibberellin bio
A:Reference number: Z16814; MUID:96367664; PMID:8771778
A:Accession: T09672
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-789 <YAM>
A:Cross-references: EMBL:U43904; NID:g1431869; PIDN:AAB39482.1; PID:g1431870
A:Experimental source: immature seeds
C:Function:
A:Description: catalyzes the conversion of copalyl diphosphate to ent-kaurene
A:Pathway: gibberellin biosynthesis
A>Note: terpene cyclase
C:Keywords: transferase

Query Match 3.8%; Score 7; DB 2; Length 789;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 73 FKBEIRS 79

Db 294 FKFEIRS 300
|||||
|||||

RESULT 42

AF2235
hypothetical protein alr3437 [imported] - Nostoc sp. (strain PCC 7120)
C:Species: Nostoc sp. PCC 7120
A:Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120
C:Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002
C:Accession: AF2235
R:Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Tasuda, M.; Tabata, S.; Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Tasuda, M.; Tabata, S.
DNA Res. 8, 205-213, 2001
A:Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Anabaena PCC 7120
A:Reference number: AB1807; MUID:21595285; PMID:11759840
A:Accession: AF2235
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-791 <STO>
A:Cross-references: GB:BA000019; PIDN:BA075136.1; PID:G17132570; GSPDB:GN00179
A:Experimental source: strain PCC 7120
C:Genetics:
A:Gene: alr3437

Query Match 3.8%; Score 7; DB 2; Length 791;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 142 ERVLKKT 148
|||||
82 ERVLKKT 88

RESULT 43

C82726
DNA uptake protein XF1078 [imported] - Xylella fastidiosa (strain 9a5c)
C:Species: Xylella fastidiosa
C:Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 20-Aug-2000
C:Accession: C82726
R:anonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Sequencing
Nature 406, 151-157, 2000
A:Title: The genome sequence of the plant pathogen Xylella fastidiosa.
A:Reference number: A82515; MUID:20365717; PMID:10910347
A:Note: for a complete list of authors see reference number A59328 below
A:Accession: C82726
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-836 <STM>
A:Cross-references: GB:AB003944; GB:AB003849; NID:G9106023; PIDN:AAF83888.1; GSPDB:GN00179
A:Experimental source: strain 9a5c
R:Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H.; Netto, E.; Docena, C.; El-Dorri, H.; Facincani, A.P.; Ferreira, A.J.S.
submitted to GenBank, June 2000
A:Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm J.D.; Gunqueira, M.L.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.E.; Laigret, M.A.; Madeira, A.M.B.N.; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, E.A.; Authors: Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; P.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A.; Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak A:Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; da Silveira M.; Tshukano, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z A:Reference number: A59328
A:Contents: annotation
C:Genetics:
A:Gene: XF1078

Query Match 3.8%; Score 7; DB 2; Length 836;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 WLALLW 22

Db 537 WLALLW 543
|||||
|||||

RESULT 44

D88465
protein B0244.7 [imported] - Caenorhabditis elegans
C:Species: Caenorhabditis elegans
C:Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 10-May-2001
C:Accession: D88465
R:anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
A:Title: Genome sequence of the nematode C. elegans: a platform for investigating biological processes
A:Reference number: AV5000; MUID:99069613; PMID:9851916
A:Note: see websites genome.wustl.edu/gsc/C_elegans/ and www.sanger.ac.uk/Projects/C_el
A:Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; an
A:Accession: D88465
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-863 <STO>
A:Cross-references: GB:chr_III; PIDN:AAA68378.1; PID:G861358; GSPDB:GN00021; CRSP:B0244
A:Note: weak similarity to G-protein coupled receptors
C:Genetics:
A:Gene: B0244.7
A:Map position: 3

Query Match 3.8%; Score 7; DB 2; Length 863;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 19 LLLWVSA 25
|||||
Db 170 LLLWVSA 176

RESULT 45

T00358
hypothetical protein KIAA0684 - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 01-Feb-1999 #sequence_revision 01-Feb-1999 #text_change 11-Jan-2002
C:Accession: T00358
R:Ishikawa, K.; Nagase, T.; Suyama, M.; Miyajima, N.; Tanaka, A.; Kotani, H.; Momura, N.
DNA Res. 5, 169-176, 1998
A:Title: Prediction of the coding sequences of unidentified human genes. X. The complet
A:Reference number: Z14142; MUID:98403880; PMID:9734811
A:Accession: T00358
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-303 <ISH>
A:Cross-references: EMBL:AB014584; NID:dl204339; PIDN:BAA31659.1
A:Experimental source: brain; clone HK02956
C:Genetics:
A:Note: KIAA0684

Query Match 3.8%; Score 7; DB 2; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 34 ASSLSL 40
|||||
Db 164 ASSLSL 170

RESULT 46

T06576
probable protein kinase TCTR2 - tomato
C:Species: Lycopersicon esculentum (tomato)
C:Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #text_change 08-Oct-1999
C:Accession: T06576
R:Hackett, R.M.
submitted to the EMBL Data Library, March 1998
A:Reference number: Z15770
A:Accession: T06576

A;Status: preliminary; translated from GB/EMBL/DD9J
A;Molecule type: mRNA
A;Residues: 1-982 <HAC>
A;Cross-references: EMBL:AJ005077; NID:e1296722; PIDN:CAA06334.1; PID:e1296723
A;Experimental source: cultivar Ailsa Craig
C;Genetics:
A;Gene: TCIR2

Query Match 3.8%; Score 7; DB 2; Length 982;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSS 39
Db 29 PASSLSS 35

RESULT 47
T32986
hypothetical protein C05D2.6 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C;Accession: T32986
R;Du, Z.
Submitted to the EMBL Data Library, February 1998
A;Description: The sequence of C. elegans cosmid C05D2.
A;Reference number: Z21260
A;Accession: T32986
A;Status: preliminary; translated from GB/EMBL/DD9J
A;Molecule type: DNA
A;Residues: 1-1008 <DUZ>
A;Cross-references: EMBL:AF047651; PIDN:AAC02723.1; GSPDB:GN00021; CESP:C05D2.6
A;Experimental source: strain Bristol N2; clone C05D2
C;Genetics:
A;Gene: CESP-C05D2.6
A;Map position: 3
A;Introns: 23/1; 53/3; 141/1; 231/3; 307/3; 325/2; 420/1; 466/3; 499/3; 522/2; 594/1; 75

Query Match 3.8%; Score 7; DB 2; Length 1008;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 129 ICASASA 135
Db 676 ICASASA 682

RESULT 48
H86438
protein T19E23.7 [imported] - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
C;Accession: H86438
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federpiet, N.A.; Kaul, S.; White, O.; Alonso,
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.;
ansen, N.F.; Hughes, B.; Huizart, L.
Nature 438, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, B.; Kim, C.
C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Lueros, J.S.; Maiti, R.; Marziali,
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon,
ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
A;Accession: H86438
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-1014 <STO>
A;Cross-references: GB:AB005172; NID:96692120; PIDN:AAF24585.1; GSPDB:GN00141
C;Genetics:
A;Gene: T19E23.7
A;Map position: 1

Query Match 3.8%; Score 7; DB 2; Length 1014;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
Db 987 ASSLSL 993

RESULT 49
T05050
protein kinase homolog M3E9.30 - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #text_change 20-Sep-1999
R;Bevan, M.; Vandenbol, M.; Jallet, C.; Portetelle, D.; Hoheisel, J.; Mewes, H.W.; May,
submitted to the Protein Sequence Database, March 1999
A;Reference number: Z15396
A;Accession: T05050
A;Molecule type: DNA
A;Residues: 1-1029 <BEV>
A;Cross-references: EMBL:AL022223
A;Experimental source: cultivar Columbia; BAC clone M3E9
C;Genetics:
A;Map position: 4
A;Introns: 428/2; 862/2
A;Note: M3E9.30
C;Superfamily: protein kinase Xa21; leucine-rich alpha-2-glycoprotein repeat homology;

Query Match 3.8%; Score 7; DB 2; Length 1029;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 110 PVEIFRL 116
Db 134 PVEIFRL 140

RESULT 50
C69048
cobalamin biosynthesis protein N - Methanobacterium thermoautotrophicum (strain Delta I
C;Species: Methanobacterium thermoautotrophicum
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 08-Oct-1999
C;Accession: C69048
R;Smith, D.R.; Doucette-Stamm, L.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, T.;
Qiu, D.; Spadafora, R.; Vicaire, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani, I.
ki, S.; Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N.
J. Bacteriol. 179, 7135-7155, 1997
A;Title: Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: fun
A;Reference number: A69000; MUID:98037514; PMID:9371463
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-1329 <MTH>
A;Cross-references: GB:AE000899; GB:AE00666; NID:92622469; PIDN:AAB85840.1; PID:926224
A;Experimental source: strain Delta H
C;Genetics:
A;Gene: MTH1363
A;Start codon: TTG
C;Superfamily: Rhodobacter capsulatus magnesium-protoporphyrin O-methyltransferase

Query Match 3.8%; Score 7; DB 2; Length 1329;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 161 TPDLVQD 167
Db 1111 TPDLVQD 1117

Search completed: June 14, 2004, 08:08:46
Job time : 21 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 14, 2004, 08:01:56 ; Search time 18 Seconds
(without alignments)
526.487 Million cell updates/sec

Title: US-10-054-988-114

Perfect score: 182
Sequence: 1 MEPQLGPEAAALRPGWLALL.....DLVQDCHQGGRELKPLCMLR 182

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 141681 seqs, 52070155 residues

Word size : 0

Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 3

Maximum DB seq length: 2000000000

Post-processing: Listing first 100 summaries

Database : SwissProt_42.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	10	5.5	530	1	TP6B SULSH
2	8	4.4	271	1	YH35 MYCTC
3	7	3.8	111	1	QR15 YEAST
4	7	3.8	118	1	DER4 HUMAN
5	7	3.8	219	1	NUD5 HUMAN
6	7	3.8	223	1	GTIX1 TOBAC
7	7	3.8	257	1	DCH THAAR
8	7	3.8	259	1	YCEC ECOLI
9	7	3.8	266	1	NAGB_VIBCH
10	7	3.8	266	1	NAGB_VIBFA
11	7	3.8	266	1	NAGB_VIBVU
12	7	3.8	267	1	NAGB_PASMU
13	7	3.8	270	1	NAGB_HAETN
14	7	3.8	274	1	RPMC YEAST
15	7	3.8	319	1	YS97 CAEEL
16	7	3.8	344	1	LIC1 BURCE
17	7	3.8	344	1	LIC2 BURCE
18	7	3.8	344	1	LICH_PSEGL
19	7	3.8	353	1	LICH_HUMAN
20	7	3.8	398	1	TEX1 HUMAN
21	7	3.8	402	1	REMI RAT
22	7	3.8	424	1	HEM1 BORBR
23	7	3.8	424	1	HEM1 BORPA
24	7	3.8	424	1	HEM1 BORPE
25	7	3.8	475	1	VTMC_RABIT
26	7	3.8	676	1	KALM_CHICK
27	7	3.8	695	1	DVLI_MOUSE
28	7	3.8	695	1	DVLI1 RAT
29	7	3.8	702	1	COAT SMSV1
30	7	3.8	717	1	NFC1_MOUSE
31	7	3.8	801	1	BRD2_HUMAN
32	7	3.8	822	1	NFC1_PIG
33	7	3.8	905	1	HEX_ADECC

34	7	3.8	905	1	HEX_ADECR	039619 canine aden
35	7	3.8	943	1	NFC1_HUMAN	095844 homo sapien
36	7	3.8	1052	1	CLMN_MOUSE	08C5W0 mus musculus
37	7	3.8	1163	1	RTN4 RAT	09Jk11 rattus norv
38	7	3.8	1192	1	RTN4_HUMAN	09ngc3 homo sapien
39	7	3.8	1302	1	UB4B_HUMAN	09S155 homo sapien
40	7	3.8	1433	1	REST_CHICK	042184 gallus gall
41	6	3.3	67	1	ATP8_EQUAS	P92479 equus asinu
42	6	3.3	76	1	VES_HPV58	P26552 human papil
43	6	3.3	89	1	NTF1_SPVKA	008513 swinepox vi
44	6	3.3	114	1	YHT8 YEAST	P38841 saccharomyc
45	6	3.3	120	1	VG19_BPMU	Q38646 bacterioph
46	6	3.3	125	1	NUIM_ABEELI	Q33756 arabacia lix
47	6	3.3	126	1	SYGB_NEIGO	Q33756 arabacia lix
48	6	3.3	129	1	V132_FOWPV	Q50945 neisseria g
49	6	3.3	130	1	ECC1_HALEL	P15914 fowlpox vir
50	6	3.3	130	1	FLHE_SALTY	Q9Z6U6 halomonas e
51	6	3.3	130	1	YJ84 YEAST	P47151 salmomella
52	6	3.3	131	1	CRGB_METKA	P47151 saccharomyc
53	6	3.3	138	1	YJH5 YEAST	Q8T426 methanopyru
54	6	3.3	141	1	HBA_MONDO	Q8hy34 monodelphis
55	6	3.3	141	1	X_WHV1	P03167 woodchuck h
56	6	3.3	147	1	PHIT_HUMAN	P49789 homo sapien
57	6	3.3	157	1	EGD1 YEAST	Q02642 saccharomyc
58	6	3.3	157	1	HES2 RAT	P35429 rattus norv
59	6	3.3	157	1	XYB2_PSEPU	Q05092 pseudomonas
60	6	3.3	161	1	CRAA_ELETR	P82530 elephanulu
61	6	3.3	161	1	CRAA_TRIIN	P02500 trichechus
62	6	3.3	164	1	IPVR_BACP3	P19514 bacillus ps
63	6	3.3	164	1	IPVR_BACST	Q05724 bacillus st
64	6	3.3	170	1	CRAA_BRAVA	P02487 bradypus va
65	6	3.3	170	1	CRAA_CHOHO	P02486 choleopus h
66	6	3.3	170	1	CRAA_TAMME	P02485 tamandua me
67	6	3.3	172	1	CRAA_MACMU	P02488 macaca mula
68	6	3.3	173	1	CRAA_ARTJA	P02482 artibeus ja
69	6	3.3	173	1	CRAA_BALAC	P02474 balaenopter
70	6	3.3	173	1	CRAA_BOVIN	P02470 bos taurus
71	6	3.3	173	1	CRAA_CAMDR	P02472 camelus dro
72	6	3.3	173	1	CRAA_CANFA	P02473 canis famil
73	6	3.3	173	1	CRAA_CAVPO	P02491 canis porce
74	6	3.3	173	1	CRAA_EULFU	P02494 eulemur ful
75	6	3.3	173	1	CRAA_GIRCA	P02471 giraffa cam
76	6	3.3	173	1	CRAA_LOXAF	P02489 homo sapien
77	6	3.3	173	1	CRAA_MANJA	P02498 loxodonta a
78	6	3.3	173	1	CRAA_MOUSE	P02484 manis javan
79	6	3.3	173	1	CRAA_MUSVI	P02490 mus musculu
80	6	3.3	173	1	CRAA_OCHPR	P02492 mustela vis
81	6	3.3	173	1	CRAA_OCHPR	P02492 ochotona pr
82	6	3.3	173	1	CRAA_ORYAF	P02501 orycteropu
83	6	3.3	173	1	CRAA_ORYAF	P02495 perodicticu
84	6	3.3	173	1	CRAA_PERPO	P02477 phocoenoid
85	6	3.3	173	1	CRAA_PIG	P02475 sus scrofa
86	6	3.3	173	1	CRAA_PROCA	P02499 procavia ca
87	6	3.3	173	1	CRAA_PTEPO	P02531 pteropus po
88	6	3.3	173	1	CRAA_RABIT	P02493 oryctolagus
89	6	3.3	173	1	CRAA_SPAEH	Q64211 spalax leuc
90	6	3.3	173	1	CRAA_USUR	P02480 ursus ursin
91	6	3.3	173	1	CRAA_ZALCA	P02481 zalophus ca
92	6	3.3	178	1	ATPD_BACCA	P41011 bacillus ca
93	6	3.3	179	1	ATPD_BACP3	P09220 bacillus ps
94	6	3.3	185	1	ATPD_GUTH	Q78476 guillardia
95	6	3.3	185	1	DCRB_ECOLI	P37620 escherichia
96	6	3.3	186	1	YHM2_ARATH	Q986U8 arabidopsis
97	6	3.3	193	1	YK02 YEAST	P36042 saccharomyc
98	6	3.3	196	1	CRA2_MESAU	P02497 mesocricetu
99	6	3.3	196	1	CRA2_MOUSE	P24622 mus musculu
100	6	3.3	196	1	CRA2_RAT	P24623 rattus norv

ALIGNMENTS

RESULT 1

```

TP6B SULSH
ID TP6B SULSH STANDARD; PRT; 530 AA.
AC Q05207;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Type II DNA topoisomerase VI subunit B (EC 5.9.9.1.3) (TopoVI-B).
GN TOP6B.
OS Sulfolobus shibatae.
OC Archaea; Crenarchaeota; Thermoprotei; Sulfolobales; Sulfolobaceae;
OC Sulfolobus.
OX NCBI_TaxID=2286;
RN [1]
RP SEQUENCE FROM N.A., AND SEQUENCE OF 492-506.
RC STRAIN=ATCC 51178 / DSM 5389 / B12;
RX MEDLINE=97238688; PubMed=9121560;
RA Bergerat A.; de Massy B.; Gabelle D.; Varoutas P.-C.; Nicolas A.;
RA Forterre P.;
RT "An atypical topoisomerase II from Archaea with implications for
RT meiotic recombination."
RL Nature 386:414-417(1997).
RN [2]
RP X-RAY CRYSTALLOGRAPHY (2.00 ANGSTROMS) OF 2-470.
RX MEDLINE=22393013; PubMed=12505993;
RA Corbett K.D.; Berger J.M.;
RT "Structure of the topoisomerase VI-B subunit: implications for type
RT II topoisomerase mechanism and evolution."
RL EMBL J. 22:151-163(2003).
CC [-] FUNCTION: Relaxes both positive and negative superturns and
CC exhibits a strong decatenase activity. The B subunit binds ATP.
CC [-] CATALYTIC ACTIVITY: ATP-dependent breakage, passage and rejoining
CC of double-stranded DNA.
CC [-] SUBUNIT: Heterotrimer of two subunits A and two subunits B.
CC [-] SIMILARITY: Belongs to the TOP6B family.
CC
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CC
CC EMBL; Y10582; CAA71604.1; --
CC PDB; 1MU5; 07-JAN-03.
CC PDB; 1MX0; 07-JAN-03.
CC HAMAP; MF_03222; --; 1.
CC InterPro; IPR003594; ATPbind_ATPase.
CC InterPro; IPR005734; DNA_Top6B.
CC Pfam; PF02518; HATPase_C; 1.
CC SMART; SM00387; HATPase_C; 1.
CC TIGRPFAMs; TIGR01052; top6b; 1.
CC Isomerase; Topoisomerase; DNA-binding; ATP-binding; 3D-structure.
SQ SEQUENCE 530 AA; 60527 MW; 772F221FCD28441A CRC64;

Query Match 5.5%; Score 10; DB 1; Length 530;
Best Local Similarity 100.0%; Pred. No. 0.042;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 116 LVSKYQNEIS 125
Db 493 LVSKYQNEIS 502
|||||
|||||

RESULT 2
ID YM35 MYCTU STANDARD; PRT; 271 AA.
AC Q10517;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Hypothetical protein RV2235/MT2294/MB2259.
GN RV2235 OR MT2294 OR MTCY427.16 OR MB2259.

```

```

OS Mycobacterium tuberculosis, and
OS Mycobacterium bovis.
OC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
OC Corynebacterineae; Mycobacteriaceae; Mycobacterium.
OX NCBI_TaxID=1773, 1765,
RN [1]
RP SEQUENCE FROM N.A.
RC SPECIES=M.tuberculosis; STRAIN=H37Rv;
RX MEDLINE=98295987; PubMed=9634230;
RA Cole S.T.; Brosch R.; Parkhill J.; Garnier T.; Churcher C.; Harris D.;
RA Gordon S.V.; Eiglmeier K.; Gas S.; Barry C.E., III; Tekle A.P.;
RA Badcock K.; Basham D.; Brown D.; Chillingworth T.; Connor R.;
RA Davies R.; Devlin K.; Feltwell T.; Gentles S.; Hamlin N.; Holroyd S.;
RA Hornsby T.; Jagels K.; Krogh A.; McLean J.; Moule S.; Murphy L.;
RA Oliver S.; Osborne J.; Quail M.A.; Rajandream M.A.; Rogers J.;
RA Rutter S.; Seeger K.; Skelton S.; Squares S.; Squares R.;
RA Sulston J.E.; Taylor K.; Whitehead S.; Barrell B.G.;
RT "Deciphering the biology of Mycobacterium tuberculosis from the
RT complete genome sequence."
RL Nature 393:537-544(1998).
RN [2]
RP SEQUENCE FROM N.A.
RC SPECIES=M.tuberculosis; STRAIN=CDC 1551 / Oshkosh;
RX MEDLINE=22206494; PubMed=12218036;
RA Fleischmann R.D.; Alland D.; Eisen J.A.; Carpenter L.; White O.;
RA Peterson J.; DeBoy R.; Dodson R.; Gwinn M.; Haft D.; Hickey E.;
RA Kolonay J.F.; Nelson M.C.; Umayam L.A.; Ermolaeva M.; Salzberg S.L.;
RA Delcher A.; Utterback T.; Weidman J.; Khouri H.; Gill J.; Mikula A.;
RA Bishai W.; Jacobs W.R. Jr.; Venter J.C.; Fraser C.M.;
RT "Whole-genome comparison of Mycobacterium tuberculosis clinical and
RT laboratory strains."
RL J. Bacteriol. 184:5479-5490(2002).
RN [3]
RP SEQUENCE FROM N.A.
RC SPECIES=M.bovis; STRAIN=AF2122/97;
RX MEDLINE=22709107; PubMed=12789972;
RA Garnier T.; Eiglmeier K.; Camus J.-C.; Medina N.; Mansoor H.;
RA Pryor M.; Duthoy S.; Grondin S.; Lacroix C.; Monsemp C.; Simon S.;
RA Harris B.; Atkin R.; Doggett J.; Mayes R.; Keating L.; Wheeler P.R.;
RA Parkhill J.; Barrell B.G.; Cole S.T.; Gordon S.V.; Hewinson R.G.;
RT "The complete genome sequence of Mycobacterium bovis."
RL Proc. Natl. Acad. Sci. U.S.A. 100:7877-7882(2003).
CC [-] SUBCELLULAR LOCATION: Integral membrane protein (Potential).
CC [-] SIMILARITY: Belongs to the SURF1 family.
CC
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CC
CC EMBL; Z70692; CAA94657.1; --
CC EMBL; AE007074; AAK46578.1; --
CC EMBL; BX248341; CAD97112.1; --
CC PIR; G70777; G70777.
CC TIGR; MT2294; --.
CC Tuberculin; RV2235; --.
CC InterPro; IPR002994; Surf1.
CC ProDom; PD024360; Surf1; 1.
CC PROSITE; PS50895; SURF1; 1.
CC Hypothetical protein; Transmembrane; Complete proteome.
FT TRANSMEM 11 33 POTENTIAL.
FT TRANSMEM 172 194 POTENTIAL.
FT TRANSMEM 214 236 POTENTIAL.
SQ SEQUENCE 271 AA; 29762 MW; A875AC1CB7B7D161 CRC64;

Query Match 4.4%; Score 8; DB 1; Length 271;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 12 LRPCWLAL 19

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Db          5 ALRPGWL 11
|||||
8 LRPGWLAL 15

RESULT 3
OR15 YEAST
ID_ OR15_YEAST STANDARD; PRT; 111 AA.
AC P23344;
DT 01-OCT-1993 (Rel. 27, Created)
DT 01-OCT-1993 (Rel. 27, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE OR15 protein.
DE OR15 OR YLR204W.
OS Saccharomyces cerevisiae (Baker's yeast).
OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
OX NCBI_TaxID=4932;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92397593; PubMed=1523888;
RA Simon M., della Seta F., Sor F., Faye G.;
RT "Analysis of the MSS51 region on chromosome XII of Saccharomyces
RL cerevisiae."
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=S288c / AB972;
RX MEDLINE=97313267; PubMed=9169871;
RA Johnston M., Hillier L., Riles L., Albertmann K., Andre B., Ansoerge W.,
RA Benes V., Brueckner M., Delius H., Dubois E., Duesterhoeft A.,
RA Entian K.-D., Floeth M., Goffeau A., Hesling U., Heumann K.,
RA Heuss-Neitzel D., Hilbert H., Hilger F., Kleine K., Koetter P.,
RA Louis E.J., Messing F., Mewes H.-W., Mioga T., Moestl D.,
RA Mueller-Auer S., Nentwich U., Obermaier B., Piravandi E., Pohl T.M.,
RA Portetelle D., Purnelle B., Rechmann S., Rieger M., Rinke M., Rose M.,
RA Schaefer M., Scherens B., Scholler P., Schwager C., Schwarz S.,
RA Underwood A.P., Urrestarazu L.A., Vanderbol M., Verhasselt P.,
RA Viendeels F., Voet M., Volckaert G., Voss H., Wambutt R., Wedler E.,
RA Wedler H., Zimmermann F.K., Zollner A., Hani J., Hoheisel J.D.;
RT "The nucleotide sequence of Saccharomyces cerevisiae chromosome XII."
RL Nature 387:87-90 (1997).
RN [3]
RP SEQUENCE OF 1-60 FROM N.A.
RX MEDLINE=83129417; PubMed=6297789;
RA Faye G., Simon M.;
RT "Analysis of a yeast nuclear gene involved in the maturation of
RL mitochondrial pre-messenger RNA of the cytochrome oxidase subunit
I."
Cell 32:77-87 (1983).
CC
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CC
CC EMBL; J01487; AAA66925.1; -
CC DR EMBL; S43721; AAB23217.1; -
CC DR EMBL; U14913; AAB67429.1; -
CC DR PIR; S25343; S25343.
CC DR Genonline; 142286; -.
CC DR SGD; S0004194; QRI5.
FT DOMAIN 82 111 ARG/LYS-RICH (BASIC).
SQ SEQUENCE 111 AA; 12772 MW; 5B25627D5B4C833D CRC64;

Query Match 3.8%; Score 7; DB 1; Length 111;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OR15 ALRPGWL 17
|||||
11 ALRPGWL 17

RESULT 4
DSR4 HUMAN
ID_ DSR4_HUMAN STANDARD; PRT; 118 AA.
AC P56555;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 16-OCT-2003 (Rel. 40, Last annotation update)
DE Down syndrome critical region protein 4 (Down syndrome critical region
DE protein B).
DE DSCR4 OR DSCRB OR DCRB.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=98116657; PubMed=9455479;
RA Nakamura A., Hattori M., Sakaki Y.;
RT "A novel gene isolated from human placenta located in Down syndrome
RL critical region on chromosome 21."
RL DNA Res. 4:321-324 (1997).
CC -!- TISSUE SPECIFICITY: Mainly expressed in placenta.
CC
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CC
CC EMBL; AB000099; BAA25877.1; -
CC DR Genew; HGNC:3045; DSCR4.
CC DR MIM; 604829; -.
SQ SEQUENCE 118 AA; 12955 MW; 97CE8D8A85F447BF CRC64;

Query Match 3.8%; Score 7; DB 1; Length 118;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 29 SPSLPAS 35
Db 59 SPSLPAS 65

RESULT 5
NUD5 HUMAN
ID_ NUD5_HUMAN STANDARD; PRT; 219 AA.
AC Q9UUK9;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE ADP-sugar pyrophosphatase YSAIH (EC 3.6.1.-) (Nucleoside diphosphate-
DE linked moiety X motif 5) (HSPC115).
DE NUDT5.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. AND CHARACTERIZATION.
RX MEDLINE=20036310; PubMed=10567213;
RA Gami L., Cartwright J.L., McLennan A.G.;
RT "Cloning, expression and characterization of YSAIH, a human adenosine
RL 5'-diphosphosugar pyrophosphatase possessing a MutT motif."
RN [2]
RP Biochem. J. 344:331-337 (1999).
CC
CC SEQUENCE FROM N.A.
CC TISSUE=Blood;

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RX MEDLINE=20499367; PubMed=11042152;
RA Zhang Q.-H., Ye M., Wu X.-Y., Ren S.-X., Zhao M., Zhao C.-J., Fu G.,
RA Shen Y., Fan H.-Y., Lu G., Zhong M., Xu X.-R., Han Z.-G., Zhang J.-W.,
RA Tao J., Huang Q.-H., Zhou J., Hu G.-X., Gu J.-X., Chen S.-J., Chen Z.;
RT "Cloning and functional analysis of cDNAs with open reading frames for
RT 300 previously undefined genes expressed in CD34+ hematopoietic
RT stem/progenitor cells";
RL Genome Res. 10:1546-1560(2000).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Stenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Brownstein M.J., Usdin T.B., Tohiyuki S., Carninci P., Prange C.,
RA Raha S.S., Lequellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
RA Whitting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley S.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Butterfield Y.S., Grimwood J., Schmutz J., Myers R.M.,
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -!- FUNCTION: Hydrolyzes with similar activities ADP-ribose and ADP-
CC mannose. Can also hydrolyzes ADP-glucose (56% of ADP-ribose
CC activity) and diadenosine diphosphate (20%).
CC -!- CATALYTIC ACTIVITY: ADP-ribose + H(2)O = AMP + D-ribose 5-
CC phosphate.
CC -!- SUBUNIT: Homodimer.
CC -!- TISSUE SPECIFICITY: Widely expressed.
CC -!- SIMILARITY: Belongs to the NUDIX hydrolase family.
CC
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CC
CC EMBL; AF155832; AAF06734.1; -;
CC EMBL; AF161464; AAF29079.1; -;
CC EMBL; HCC00025; AAH00025.1; -;
CC Genew; HGNC:8052; NUDT5.
CC GO; GO:0035622; C:intracellular; NAS.
CC GO; GO:0019144; F:ADP-sugar diphosphatase activity; IDA.
CC GO; GO:005515; F:protein binding; NAS.
CC GO; GO:0019303; P:D-ribose catabolism; NAS.
CC InterPro; IPR000086; NUDIX_hydrolase.
CC Pfam; PF00293; NUDIX; 1.
CC PRINTS; PR00502; NUDIXFAMILY.
CC PROSITE; PS00893; NUDIX; 1.
FT DOMAIN
FT
FT SEQUENCE 97 118 NUDIX BOX
SQ SEQUENCE 219 AA; 24327 MW; 6574E0BF1EA2BB26 CRC64;
Query Match 3.8%; Score 7; DB 1; Length 219;
Best Local Similarity 100.0%; Pred. No. 21;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 7 PERAALR 13
DB 105 PEAALR 111

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RESULT 6
GTXL1 TOBAC STANDARD; ERT; 223 AA.
AC Q03632;
DT 01-OCT-1993 (Rel. 27, Created)
DT 01-OCT-1993 (Rel. 27, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Probable glutathione S-transferase (EC 2.5.1.18) (Auxin-induced
DE protein PGNT1/PGNT110).
OS Nicotiana tabacum (Common tobacco).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC lamids; Solanales; Solanaceae; Nicotiana.
OX NCBI_TaxID=4097;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=cv. White Burley, and cv. Samsun NN; TISSUE=Leaf;
RX MEDLINE=91322513; PubMed=1863770;
RA van der Zaal E.J., Droog F.N.J., Boot C.J.M., Hensgens L.A.M.,
RA Hoge J.H.C., Schilperoort R.A., Libbenga K.R.;
RT "Promoters of auxin-induced genes from tobacco can lead to auxin-
RT inducible and root tip-specific expression.";
RL Plant Mol. Biol. 16:983-998(1991).
CC -!- CATALYTIC ACTIVITY: RX + glutathione = HX + R-S-glutathione.
CC -!- TISSUE SPECIFICITY: Root tip-specific expression.
CC -!- INDUCTION: By auxin.
CC -!- SIMILARITY: Belongs to the GST superfamily. HSP26 family.
CC
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CC
CC EMBL; X56268; CAA39709.1; -;
CC EMBL; X56264; CAA39705.1; -;
CC PIR; S16267; S16267.
CC InterPro; IPR004046; GST_Cterm.
CC Pfam; PF00043; GST_C; 1.
CC Pfam; PF02798; GST_N; 1.
CC Transferase; MultiGene family.
SQ SEQUENCE 223 AA; 25667 MW; 0B29A74FC15869BD CRC64;
Query Match 3.8%; Score 7; DB 1; Length 223;
Best Local Similarity 100.0%; Pred. No. 21;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 131 ASASAPK 137
DB 217 ASASAPK 223
RESULT 7
DCH THAAR STANDARD; PRT; 257 AA.
AC Q087873;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Cyclohexa-1,5-dienecarbonyl-CoA hydratase (EC 4.2.1.100) (Cyclohexa-
DE 1,5-diene-1-carboxyl-CoA hydratase) (Dienoyl-CoA hydratase).
GN DCH.
OS Thaueria aromatica.
OC Bacteria; Proteobacteria; Betaproteobacteria; Rhodocyclales;
OC Rhodocyclaceae; Thaueria.
OX NCBI_TaxID=59405;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=98417440; PubMed=9746358;

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RA Breese K., Boll M., Alt-Moerbe J., Schaeffer H., Fuchs G.;
 RT "Genes coding for the benzoyl-CoA pathway of anaerobic aromatic
 RT metabolism in the bacterium Thauera aromatica.";
 RL Eur. J. Biochem. 256:148-154(1998).
 RN [2]
 RP SEQUENCE OF 1-20, AND CHARACTERIZATION.
 RX MEDLINE=98409281; PubMed=9738901;
 RA Laepte D., Eisenreich W., Sacher A., Fuchs G.;
 RT "Cyclohexa-1,5-diene-1-carboxyl-CoA hydratase, an enzyme involved in
 RT anaerobic metabolism of benzoyl-CoA in the denitrifying bacterium
 RT Thauera aromatica.";
 RL Eur. J. Biochem. 255:618-627(1998).
 CC -!- FUNCTION: Catalyzes the hydration of cyclohexa-1,5-diene-1-
 CC carboxyl-CoA.
 CC -!- CATALYTIC ACTIVITY: Cyclohexa-1,5-dienecarboxyl-CoA + H(2)O = 6-
 CC hydroxycyclohex-1-enecarboxyl-CoA.
 CC -!- PATHWAY: Aromatic compounds metabolism via benzoyl-CoA.
 CC -!- SIMILARITY: Belongs to the enoyl-CoA hydratase/isomerase family.
 CC -----
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 CC -----
 DR EMBL; AJ224959; CAA12246.1; -;
 DR InterPro; IPR001753; EnCoA_hydrts.
 DR Pfam; PF00378; ECH; 1.
 DR PROSITE; PS00166; ENOYL COA HYDRATASE; FALSE_NEG.
 DR Lysase; Aromatic hydrocarbons catabolism.
 FT INIT_MET 0
 FT SEQUENCE 257 AA; 27751 MW; 50FF4B61A868BF2C CRC64;
 Query Match 3.8%; Score 7; DB 1; Length 257;
 Best Local Similarity 100.0%; Pred. No. 24;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 7 PEAALR 13
 Db 183 PEAALR 189
 RESULT 8
 YCBC_ECOLI STANDARD; PRT; 259 AA.
 AC P36565; P75846;
 DT 01-JUN-1994 (Rel. 29, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Hypothetical protein ycbc.
 GN YCBC OR B0920 OR Z1267 OR ECS1003.
 OS Escherichia coli, and
 OS Escherichia coli O157:H7.
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
 OC Enterobacteriaceae; Escherichia.
 OX NCBI_TaxID=562, 83334;
 RN [1]
 RN SEQUENCE FROM N.A.
 RC STRAIN=K12 / MG1655;
 RX MEDLINE=97426617; PubMed=9278503;
 RA Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland V.,
 RA Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F.,
 RA Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.J.,
 RA Mau B., Shao Y.;
 RT "The complete genome sequence of Escherichia coli K-12.";
 RL Science 277:1453-1474(1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=K12;
 RX MEDLINE=97061202; PubMed=8905232;
 RA Oshima T., Aiba H., Baba T., Fujita K., Hayashi K., Honjo A.,

RA Ikemoto K., Inada T., Itoh T., Kajihara M., Kanai K., Kashimoto K.,
 RA Kimura S., Kitagawa M., Makino K., Masuda S., Miki T., Mizobuchi K.,
 RA Mori H., Motomura K., Nakamura Y., Nishimoto H., Nishio Y., Saito N.,
 RA Sampei G., Seki Y., Tagami H., Takemoto K., Wada C., Yamamoto Y.,
 RA Yano M., Horiuchi T.;
 RT "A 718-kb DNA sequence of the Escherichia coli K-12 genome
 RT corresponding to the 12.7-28.0 min region on the linkage map.";
 RL DNA Res. 3:137-155(1996).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC STRAIN=O157:H7 / EDL933 / ATCC 700927;
 RX MEDLINE=21074935; PubMed=11206351;
 RA Perna N.T., Plunkett G. III, Burland V., Mau B., Glasner J.D.,
 RA Rose D.J., Plunkett G.F., Evans P.S., Gregor J., Kirkpatrick H.A.,
 RA Posfai G., Hackett J., Klink S., Boutin A., Shao Y., Miller L.,
 RA Grobeck E.J., Davis N.W., Lim A., Dimalanta E.T., Potamoudis K.,
 RA Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz D.C.,
 RA Welch R.A., Blattner F.R.;
 RT "Genome sequence of enterohaemorrhagic Escherichia coli O157:H7";
 RL Nature 409:529-533(2001).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=O157:H7 / RIMD 0509952;
 RX MEDLINE=21156231; PubMed=11258796;
 RA Hayashi T., Makino K., Ohnishi M., Kurokawa K., Ishii K., Yokoyama K.,
 RA Han C.-G., Ohtsubo E., Nakayama K., Murata T., Tanaka M., Tobe T.,
 RA Iida T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunaga T.,
 RA Kuhara S., Shiba T., Hattori M., Shinagawa H.;
 RT "Complete genome sequence of enterohaemorrhagic Escherichia coli
 RT O157:H7 and genomic comparison with a laboratory strain K-12.";
 RL DNA Res. 9:11-22(2001).
 RN [5]
 RP SEQUENCE OF 1-170 FROM N.A.
 RC STRAIN=K12 / W3110;
 RX MEDLINE=94232180; PubMed=7513784;
 RA Feng J., Yamanaka K., Niki H., Ogura T., Hiraga S.;
 RT "New killing system controlled by two genes located immediately
 RT upstream of the mukB gene in Escherichia coli.";
 RL Mol. Gen. Genet. 243:136-147(1994).
 CC -----
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 CC -----
 DR EMBL; AR000194; AAC74006.1; -;
 DR EMBL; D90730; BAA35666.1; -;
 DR EMBL; AR005281; AAG55405.1; -;
 DR EMBL; AP002553; BAB3426.1; -;
 DR EMBL; D26440; -; NOT_ANNOTATED_CDS.
 DR PIR; A85618; A85618.
 DR PIR; C90754; C90754.
 DR PIR; G64831; G64831.
 DR EcoGene; EG12166; ycbC.
 DR InterPro; IPR003848; DUF218.
 DR Pfam; PF02698; DUF218; 1.
 KW Hypothetical protein; Complete proteome.
 FT CONFLICT 89 171 Y -> N (IN REF. 5).
 FT CONFLICT 150 171 GVPREQITLDLPKDTTEEA -> ACRASKLSPWICQKI
 FT PPKKLQ (IN REF. 5).
 FT SEQUENCE 259 AA; 28666 MW; 7EAE14C696DAA0C9 CRC64;
 Query Match 3.8%; Score 7; DB 1; Length 259;
 Best Local Similarity 100.0%; Pred. No. 24;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 15 GWLALL 21
 Db 46 GWLALL 52

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RESULT 9
NAGB_VIBCH STANDARD; PRT; 266 AA.
AC Q9KK35;
DT 10-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DE Glucosamine-6-phosphate deaminase (EC 3.5.99.6) (Glucosamine-6-
DE phosphate isomerase) (GNPDA) (GlcN6P deaminase).
GN NAGB OR VCA1025.
OS Vibrio cholerae.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
OC Vibrionaceae; Vibrio.
OX NCBI_TaxID=666;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=E1 TOR N16961 / Serotype O1;
RX MEDLINE=20406833; PubMed=10952301;
RA Heidelberg J.F., Eisen J.A., Nelson W.C., Clayton R.A., Gwinn M.L.,
RA Dodson R.J., Haft D.H., Hickey E.K., Peterson J.D., Umayam L.A.,
RA Gill S.R., Nelson K.E., Read T.D., Tettelin H., Richardson D.,
RA Emolaeva M.D., Vamathevan J., Bass S., Qin H., Dragoi I., Sellers P.,
RA McDonald L., Utterback T., Fleischmann R.D., Nierman W.C., White O.,
RA Salzberg S.L., Smith H.O., Colwell R.R., Mekalanos J.J., Venter J.C.,
RA Fraser C.M.;
RT "DNA sequence of both chromosomes of the cholera pathogen Vibrio
RT cholerae."
RL Nature 406:477-483(2000).
CC -1- FUNCTION: Catalyzes the reversible isomerization-deamination of
CC glucosamine 6-phosphate (GlcN6P) to form fructose 6-phosphate
CC (Fruc6P) and ammonium ion (By similarity).
CC -1- CATALYTIC ACTIVITY: D-glucosamine 6-phosphate + H(2)O = D-fructose
CC 6-phosphate + NH(3).
CC -1- ENZYME REGULATION: Allosterically activated by N-acetylglucosamine
CC 6-phosphate (GlcNAc6P) (By similarity).
CC -1- PATHWAY: N-acetylglucosamine utilization.
CC -1- SUBUNIT: Homohexamer (By similarity).
CC -1- SIMILARITY: Belongs to the glucosamine/galactosamine-6-phosphate
CC isomerase family. NagB subfamily.
CC
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CC -----
CC EMBL; AE004428; AAF96921.1; -.
CC HSP; P09375; IDEA.
CC TIGR; VCA1025; -.
CC HAMAP; MF_01241; -.
CC InterPro; IPR006148; Gluc_gal_isom.
CC Pfam; PF01182; Glucosamine iso; 1.
CC TIGRfam; TIGR00502; nagB_1
CC PROSITE; PS01161; GLC_GALNAC_ISOMERASE; 1.
KW Carbohydrate metabolism; Hydrolase; Allosteric enzyme;
KW Complete proteome.
FT ACT_SITE 72 72 GENERAL BASE CATALYZING THE GLCN6P
FT ENOLIZATION STEP (BY SIMILARITY).
FT ACT_SITE 141 141 PART OF THE CATALYTIC TRIAD (BY
FT SIMILARITY).
FT ACT_SITE 143 143 GENERAL BASE INVOLVED IN THE CATALYSIS OF
FT THE RING-OPENING STEP OF GLCN6P; PART OF
FT THE CATALYTIC TRIAD (BY SIMILARITY).
FT ACT_SITE 148 148 PART OF THE CATALYTIC TRIAD (BY
FT SIMILARITY).
FT SITE 151 151 PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 158 158 PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).

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FT SITE 160 160 PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 161 161 PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
FT SITE 254 254 PART OF THE ALLOSTERIC SITE (BY
FT SIMILARITY).
SQ SEQUENCE 266 AA; 29548 MW; A13B661DE17213E CRC64;

Query Match 3.8%; Score 7; DB 1; Length 266;
Best Local Similarity 100.0%; Pred.No. 25;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 33 PASSLS 39
Db 149 PASSLS 155

RESULT 10
NAGB_VIBPA STANDARD; PRT; 266 AA.
AC Q87K60;
DT 10-OCT-2003 (Rel. 42, Created)
DT 10-OCT-2003 (Rel. 42, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Glucosamine-6-phosphate deaminase (EC 3.5.99.6) (Glucosamine-6-
DE phosphate isomerase) (GNPDA) (GlcN6P deaminase).
GN NAGB OR VPA0038.
OS Vibrio parahaemolyticus.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales;
OC Vibrionaceae; Vibrio.
OX NCBI_TaxID=670;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=RIND 2210633 / Serotype O3:K6;
RX MEDLINE=22508454; PubMed=12620739;
RA Makino K., Oshima K., Kurokawa K., Yokoyama K., Uda T., Tagomori K.,
RA Iijima Y., Najima M., Nakano M., Yamashita A., Kubota Y., Kimura S.,
RA Yasunaga T., Honda T., Shinagawa H., Hattori M., Iida T.;
RT "Genome sequence of Vibrio parahaemolyticus: a pathogenic mechanism
RT distinct from that of V. cholerae."
RL Lancet 361:743-749(2003).
CC -1- FUNCTION: Catalyzes the reversible isomerization-deamination of
CC glucosamine 6-phosphate (GlcN6P) to form fructose 6-phosphate
CC (Fruc6P) and ammonium ion (By similarity).
CC -1- CATALYTIC ACTIVITY: D-glucosamine 6-phosphate + H(2)O = D-fructose
CC 6-phosphate + NH(3).
CC -1- ENZYME REGULATION: Allosterically activated by N-acetylglucosamine
CC 6-phosphate (GlcNAc6P) (By similarity).
CC -1- PATHWAY: N-acetylglucosamine utilization.
CC -1- SUBUNIT: Homohexamer; trimer of disulfide-linked dimers (By
CC similarity).
CC -1- SIMILARITY: Belongs to the glucosamine/galactosamine-6-phosphate
CC isomerase family. NagB subfamily.
CC
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CC -----
CC EMBL; AP005084; BAC61381.1; -.
CC HAMAP; MF_01241; -.
CC InterPro; IPR006148; Gluc_gal_isom.
CC Pfam; PF01182; Glucosamine iso; 1.
CC PROSITE; PS01161; GLC_GALNAC_ISOMERASE; 1.
KW Carbohydrate metabolism; Hydrolase; Allosteric enzyme;
KW Complete proteome.
FT ACT_SITE 72 72 GENERAL BASE CATALYZING THE GLCN6P
FT ENOLIZATION STEP (BY SIMILARITY).
FT ACT_SITE 141 141 PART OF THE CATALYTIC TRIAD (BY

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Saccharomycetales; Saccharomycetaceae; Saccharomyces.
 OX NCBI_TaxID=4932;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=S288C / AB972;
 RX MEDLINE=92225069; PubMed=1563492;
 RA Nisogi H., Komnami K.-I., Tanaka K., Toh-E A.;
 RT "A new essential gene of *Saccharomyces cerevisiae*, a defect in it may
 result in instability of nucleus.";
 RL Exp. Cell Res. 200:48-57(1992).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=S288C / AB972;
 RX MEDLINE=95400292; PubMed=7670463;
 RA Murakami Y., Naitou M., Hagiwara H., Shibata T., Ozawa M.,
 RA Sasanuma S.-I., Sasanuma M., Tsuchiya Y., Soeda E., Yokoyama K.,
 RA Yamazaki M., Tashiro H., Eki T.;
 RT "Analysis of the nucleotide sequence of chromosome VI from
Saccharomyces cerevisiae.";
 RL Nat. Genet. 10:261-268(1995).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC STRAIN=S288C / AB972;
 RX MEDLINE=96287652; PubMed=8696379;
 RA Eki T., Naitou M., Hagiwara H., Ozawa M., Sasanuma S.-I.,
 RA Sasanuma M., Tsuchiya Y., Shibata T., Hanaoka F., Murakami Y.;
 RT "Analysis of a 36.2 kb DNA sequence including the right telomere of
 chromosome VI from *Saccharomyces cerevisiae*.";
 RL Yeast 12:149-167(1996).
 RN [4]
 RP CHARACTERIZATION.
 RX MEDLINE=95347337; PubMed=7621825;
 RA Komnami K.-I., DeMartino G.N., Moomaw C., Slaughter C.A.,
 RA Shimbara N., Fujimuro M., Yokosawa H., Hisamatsu H., Tanahashi N.,
 RA Shimizu Y., Tanaka K., Toh-E A.;
 RT "Nin1p, a regulatory subunit of the 26S proteasome, is necessary for
 activation of Cdc28p kinase of *Saccharomyces cerevisiae*.";
 RL EMBO J. 14:3105-3115(1995).
 CC -!- FUNCTION: Acts as a regulatory subunit of the 26S proteasome which
 is involved in the ATP-dependent degradation of ubiquitinated
 proteins. Necessary for activation of the Cdc28 kinase.
 CC -!- SIMILARITY: Belongs to the proteasome subunit S14 family.
 CC -----
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 or send an email to license@sib-sib.ch).
 CC -----
 DR EMBL; D10515; BAA01390.1; .
 DR EMBL; D50617; BAA09291.1; .
 DR PIR; S27434; S27434.
 DR GenOnline; 140206;
 DR SCD; S0005948; RPN12.
 DR GO; GO:0005838; C:proteasome regulatory particle (sensu Eukarya); IDA.
 DR GO; GO:0004175; F:endorpeptidase activity; NAS.
 DR GO; GO:0006511; P:ubiquitin-dependent protein catabolism; IMP.
 DR InterPro; IPR006746; Nin1_C.
 DR Pfam; PF04653; Nin1_C; 1.
 DR Proteasome.
 KW SEQUENCE 274 AA; 31919 MW; D901AAD4D07ED3D1 CRC64;
 Query Match 3.8%; Score 7; DB 1; Length 274;
 Best Local Similarity 100.0%; Pred. No. 25;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 92 DLSLSP 98
 Db 139 DLSLSP 145
 RESULT 15

YS97 CAEEL
 ID YS97 CAEEL STANDARD; PRT; 319 AA.
 AC Q09966;
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE Putative G protein-coupled receptor B0244.7.
 GN B0244.7.
 OS Caenorhabditis elegans.
 OC Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
 OC Rhabditidae; Peloderinae; Caenorhabditis.
 OX NCBI_TaxID=6239;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Bristol N2;
 RA Faveillo A.;
 RL Submitted (JUN-1995) to the EMBL/GenBank/DBJ databases.
 RN [2]
 RP REVISIONS.
 RA Waterston R.;
 RL Submitted (JUN-2001) to the EMBL/GenBank/DBJ databases.
 CC -!- SUBCELLULAR LOCATION: Integral membrane protein (Potential).
 CC -!- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
 CC Subfamily B0244.
 CC -----
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 CC -----
 DR EMBL; U28971; AAK68670.1; .
 DR WormPep; B0244.7; CE26790.
 DR GO; GO:0016021; C:integral to membrane; NAS.
 DR GO; GO:0004930; F:G-protein coupled receptor activity; NAS.
 DR GO; GO:0007186; P:G-protein coupled receptor protein signalin. .; NAS.
 DR InterPro; IPR000276; GPCR_Rhodpsn.
 DR Pfam; PF00001; 7tm_1; 1.
 DR PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
 DR PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
 KW Hypothetical protein; G-protein coupled receptor; Transmembrane;
 KW Glycoprotein.
 FT TRANSMEM 49 69 POTENTIAL.
 FT TRANSMEM 107 127 POTENTIAL.
 FT TRANSMEM 131 151 POTENTIAL.
 FT TRANSMEM 166 186 POTENTIAL.
 FT TRANSMEM 206 226 POTENTIAL.
 FT TRANSMEM 261 281 POTENTIAL.
 FT CARBOHYD 28 28 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SQ SEQUENCE 319 AA; 35782 MW; 023718ACBE8366C CRC64;
 Query Match 3.8%; Score 7; DB 1; Length 319;
 Best Local Similarity 100.0%; Pred. No. 29;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 19 LLLWVSA 25
 Db 170 LLLWVSA 176
 RESULT 16

LIC1 BURCE
 ID LIC1 BURCE STANDARD; PRT; 344 AA.
 AC P22089;
 DT 01-AUG-1991 (Rel. 19, Created)
 DT 01-AUG-1991 (Rel. 19, Last sequence update)
 DT 01-OCT-1994 (Rel. 30, Last annotation update)
 DE Lipase chaperone (Lipase foldase) (Lipase helper protein)
 DE Lipase activator protein (Lipase modulator).
 GN LIPE OR LIMA.
 OS Burkholderia cepacia (Pseudomonas cepacia).

CC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
 CC Burkholderiaceae; Burkholderia.
 CC NCBI_TaxID=292;
 CC [1]
 CC SEQUENCE FROM N.A.
 CC STRAIN=DSM 3959;
 CC MEDLINE=91100343; PubMed=1987151;
 CC RA Joergensen S., Skov K.W., Diderichsen B.
 CC "Cloning, sequence, and expression of a lipase gene from *Pseudomonas*
 CC cepacia: lipase production in heterologous hosts requires two
 CC *Pseudomonas* genes.";
 CC J. Bacteriol. 173:559-567(1991).
 CC -!- FUNCTION: SEEMS TO BE ACTING IN THE FOLDING OF THE EXTRACELLULAR
 CC LIPASE DURING ITS PASSAGE THROUGH THE PERIPLASM (BY SIMILARITY).
 CC -!- SUBCELLULAR LOCATION: Inner membrane-anchored (By similarity).
 CC -!- SIMILARITY: Belongs to the lipase chaperone family.
 CC
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 CC
 CC EMBL; M58494; AAA50467.1; -;
 CC F1R; B39133; B39133.
 CC InterPro; IPR004961; Lipase chap.
 CC Pfam; PF03280; Lipase chap. 1.
 CC Lipid degradation; Chaperone; Transmembrane; Periplasmic;
 CC Inner membrane.
 CC TRANSMEM 14 34 POTENTIAL.
 CC SEQUENCE 344 AA; 36445 MW; 32AF7F822471642B CRC64;
 CC
 CC Query Match 3.8%; Score 7; DB 1; Length 344;
 CC Best Local Similarity 100.0%; Pred. No. 31;
 CC Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 5 LGPEAAA 11
 CC Db 270 LGPEAAA 276
 CC [1]
 CC
 CC RESULT 17
 CC LIC2 BURCE STANDARD; PRT; 344 AA.
 CC AC Q9ZEW5;
 CC DT 16-OCT-2001 (Rel. 40, Created)
 CC DT 28-FEB-2003 (Rel. 41, Last sequence update)
 CC DE Lipase chaperone (Lipase foldase) (Lipase helper protein)
 CC (Lipase activator protein) (Lipase modulator).
 CC GN LIPB OR HP
 CC OS Burkholderia cepacia (Pseudomonas cepacia).
 CC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
 CC Burkholderiaceae; Burkholderia.
 CC NCBI_TaxID=292;
 CC [1]
 CC SEQUENCE FROM N.A.
 CC STRAIN=ATCC 21808;
 CC MEDLINE=99124623; PubMed=9255617;
 CC RA Quyen D.T., Schmidt-Dannert C., Schmid R.D.;
 CC "High-level formation of active *Pseudomonas cepacia* lipase after
 CC heterologous expression of the encoding gene and its modified
 CC chaperone in *Escherichia coli* and rapid in vitro refolding.";
 CC RL Appl. Environ. Microbiol. 65:787-794(1999).
 CC -!- FUNCTION: SEEMS TO BE ACTING IN THE FOLDING OF THE EXTRACELLULAR
 CC LIPASE DURING ITS PASSAGE THROUGH THE PERIPLASM.
 CC -!- SUBCELLULAR LOCATION: Inner membrane-anchored (By similarity).
 CC -!- SIMILARITY: Belongs to the lipase chaperone family.
 CC
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 CC
 CC EMBL; AJ131766; CAM10510.1; -;
 CC InterPro; IPR004961; Lipase chap.
 CC Pfam; PF03280; Lipase chap. 1.
 CC Lipid degradation; Chaperone; Transmembrane; Periplasmic;
 CC Inner membrane.
 CC TRANSMEM 14 34 POTENTIAL.
 CC SEQUENCE 344 AA; 36421 MW; AC37A4EF919B71B5 CRC64;
 CC
 CC Query Match 3.8%; Score 7; DB 1; Length 344;
 CC Best Local Similarity 100.0%; Pred. No. 31;
 CC Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 5 LGPEAAA 11
 CC Db 270 LGPEAAA 276
 CC [1]
 CC
 CC RESULT 18
 CC LIC2 PSESS STANDARD; PRT; 344 AA.
 CC AC P25276;
 CC DT 01-MAY-1992 (Rel. 22, Created)
 CC DT 01-MAY-1992 (Rel. 22, Last sequence update)
 CC DT 16-OCT-2001 (Rel. 40, Last annotation update)
 CC DE Lipase chaperone (Lipase foldase) (Lipase helper protein)
 CC (Lipase activator protein) (Lipase modulator) (Transcriptional
 CC activator act).
 CC GN LIPB OR ACT.
 CC OS Pseudomonas sp. (strain KWI-56).
 CC Bacteria; Proteobacteria.
 CC NCBI_TaxID=311;
 CC [1]
 CC SEQUENCE FROM N.A.
 CC MEDLINE=92118328; PubMed=1368739;
 CC RA Iizumi T., Nakamura K., Shimada Y., Sugihara A., Tominaga Y.,
 CC Fukase T.;
 CC "Cloning, nucleotide sequencing, and expression in *Escherichia coli*
 CC of a lipase and its activator genes from *Pseudomonas* sp. KWI-56.";
 CC RL Agric. Biol. Chem. 55:2349-2357(1991).
 CC -!- FUNCTION: SEEMS TO BE ACTING IN THE FOLDING OF THE EXTRACELLULAR
 CC LIPASE DURING ITS PASSAGE THROUGH THE PERIPLASM (BY SIMILARITY).
 CC -!- SUBCELLULAR LOCATION: Inner membrane-anchored (By similarity).
 CC -!- SIMILARITY: Belongs to the lipase chaperone family.
 CC
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 CC
 CC EMBL; D10069; BAA00961.1; -;
 CC EMBL; S77842; AAC60401.1; -;
 CC InterPro; IPR004961; Lipase chap.
 CC Pfam; PF03280; Lipase chap. 1.
 CC Lipid degradation; Chaperone; Transmembrane; Periplasmic;
 CC Inner membrane.
 CC TRANSMEM 14 34 POTENTIAL.
 CC SEQUENCE 344 AA; 36544 MW; ABD9F8F68A44108B CRC64;
 CC
 CC Query Match 3.8%; Score 7; DB 1; Length 344;
 CC Best Local Similarity 100.0%; Pred. No. 31;
 CC Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 5 LGPEAAA 11
 CC [1]
 CC

Db 270 LGPEAAA 276

RESULT 19

LICH_PSEGL

ID LICH_PSEGL STANDARD; PRT; 353 AA.

AC Q05490;

DT 01-OCT-1994 (Rel. 30, Created);

DT 01-OCT-1994 (Rel. 30, Last sequence update)

DT 16-OCT-2001 (Rel. 40, Last annotation update)

DE Lipase chaperone (lipase foldase) (lipase helper protein)

DE (lipase activator protein) (lipase modulator).

GN LIPB.

OS Pseudomonas glumae.

OC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;

OC Burkholderiaceae; Burkholderia.

OX NCBI_TaxID=337;

RN [1]_TaxID=337;

RP SEQUENCE FROM N.A.

RC STRAIN=PG1;

RX MEDLINE=94018652; PubMed=8412704;

RA Frenken L.G.J., Bos J.W., Visser C., Mueller W., Tommassen J.,

RA Verrips C.T.;

RT "An accessory gene, lipB, required for the production of active

RT Pseudomonas glumae lipase."

RL Mol. Microbiol. 9:579-589 (1993).

RN [2]

RP FUNCTION.

RX MEDLINE=94018653; PubMed=8412705;

RA Frenken L.G.J., de Groot A., Tommassen J., Verrips C.T.;

RT "Role of the lipB gene product in the folding of the secreted lipase

RT of Pseudomonas glumae."

RL Mol. Microbiol. 9:591-599 (1993).

CC -!- FUNCTION: SEEMS TO BE ACTING IN THE FOLDING OF THE EXTRACELLULAR

CC LIPASE DURING ITS PASSAGE THROUGH THE PERIPLASM.

CC -!- SUBCELLULAR LOCATION: Inner membrane-anchored.

CC -!- SIMILARITY: Belongs to the lipase chaperone family.

CC

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CC

DR EMBL: X70354; CAA49813.1; -

DR PIR: S36249; S36249.

DR InterPro: IPR004961; Lipase_chap.

DR Pfam: PF03280; Lipase_chap; 1.

KW Lipid degradation; Chaperone; Transmembrane; Periplasmic;

KW Inner membrane.

FT TRANSMEM 20 40 POTENTIAL.

FT SEQUENCE 353 AA; 36930 MW; 57C5916D78BB8643 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 353;

Best Local Similarity 100.0%; Pred. No. 32;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 LGPEAAA 11

Db 281 LGPEAAA 287

|||||

RESULT 20

TBX1 HUMAN

ID TBX1 HUMAN STANDARD; PRT; 398 AA.

AC Q43435; Q43436; Q96KJ2;

DT 15-JUL-1999 (Rel. 38, Created)

DT 15-JUL-1999 (Rel. 38, Last sequence update)

DT 10-OCT-2003 (Rel. 42, Last annotation update)

DE T-box transcription factor TBX1 (T-box protein 1) (Testis-specific

DE T-box protein).

GN TBX1.

OS Homo sapiens (Human).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

OX NCBI_TaxID=9606;

RN [1]

RP SEQUENCE FROM N.A. (ISOFORMS A AND B).

RC TISSUE=Skeletal muscle, and Testis;

RX MEDLINE=97422603; PubMed=9268629;

RA Chieffo C., Garvey N., Gong W., Roe B., Zhang G., Silver L.,

RA Emanuel B.S., Budarf M.L.;

RT "Isolation and characterization of a gene from the Digeorge

RT chromosomal region homologous to the mouse Tbx1 gene.";

RL Genomics 43:267-277 (1997).

RN [2]

RP SEQUENCE FROM N.A. (ISOFORM C).

RC Gong W., Gottlieb S., Budarf M.L.;

RT "Mutation analysis of TBX1 in 105 patients.";

RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.

CC -!- SUBCELLULAR LOCATION: Nuclear (Potential).

CC -!- ALTERNATIVE PRODUCTS:

CC Event=Alternative splicing; Named isoforms=3;

CC Name=A;

CC IsoId=O43435-1; Sequence=Displayed;

CC Name=B;

CC IsoId=O43435-2; Sequence=VSP_006383;

CC Name=C; Synonyms=TBX1C;

CC IsoId=O43435-3; Sequence=VSP_007423;

CC -!- SIMILARITY: Contains 1 T-box domain.

CC

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CC

DR EMBL: AF012130; AAB94018.1; -

DR EMBL: AF012131; AAB94019.1; -

DR EMBL: AF373867; AAK58955.1; -

DR HSP: P24781; IYER.

DR TRANSFAC; T04352; -

DR TRANSFAC; T04354; -

DR GeneW; HGNC:11592; TBX1.

DR MIM; 602054; -

DR GO; GO:0003702; F:RNA polymerase II transcription factor acti. . .; TAS.

DR GO; GO:0007345; P:embryogenesis and morphogenesis; TAS.

DR GO; GO:0007507; P:heart development; TAS.

DR GO; GO:0006357; P:regulation of transcription from Pol II pro. . .; TAS.

DR InterPro: IPR008967; P53-like.

DR InterPro: IPR001699; TF_T-box.

DR Pfam; PF00907; T-box; 1.

DR PRINTS; PR00917; TBOX.

DR SMART; SM00425; TBOX; 1.

DR PROSITE; PS01283; TBOX_1; 1.

DR PROSITE; PS01264; TBOX_2; 1.

DR PROSITE; PS50252; TBOX_3; 1.

KW Transcription regulation; DNA-binding; Nuclear protein;

KW Alternative splicing.

FT DOMAIN 43 48 POLY-PRO.

FT DOMAIN 54 57 POLY-ALA.

FT DOMAIN 61 67 POLY-PRO.

FT DOMAIN 94 99 POLY-ALA.

FT DNA BIND 119 297 T-BOX.

FT VARSPLIC 338 398 GHVLKDKVKVKAETSRNTPEREVELLRDAGGCVNLGLPCPAE

FT QCPNTQGLVAGTAGDRLC -> LVTEGSLQGLLDVLL

FT KPFSKSESRLRPCHKDT (in isoform B).

FT /FTid=VSP_006383.

FT GHVLKDKVKVKAETSRNTPEREVELLRDAGGCVNLGLPCPAE

FT ECQPTNQGLVAGTAGDRLC -> DAEEARREFQDAGGP

FT AVLGDPAPQGLVLRVLSPLPGAGGAGGLVPLFGAPGGRP

FT SPNPELRLEAPGASEPLHHPKYKYPAAAYDHYLGAKSRPA

```

FT      PYPFLRLRGHGYPHAPHHHHPVSPAAAAAIAAAAAAAAAAA
FT      ANMYSSAGAAPPQSYDYCPFR (in isoform C).
FT      /FTID=VS2 007423.
SQ      SEQUENCE 398 AA; 43133 MW; FAF0F3FA0CDC6176 CRC64;

Query Match          3.8%; Score 7; DB 1; Length 398;
Best Local Similarity 100.0%; Pred. No. 36;
Matches ?; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      34 ASSLSL 40
Db       |||||
         15 ASSLSL 21

RESULT 21
RENI RAT
AC PC8424; Q63497; STANDARD; PRT; 402 AA.
DT 01-AUG-1988 (Rel. 08, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DE 15-MAR-2004 (Rel. 43, Last annotation update)
GN RENI OR REN.
OS Rattus norvegicus (Rat);
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxId=10116;
RN [1]
   SEQUENCE FROM N.A.
RC STRAIN=Sprague-Dawley;
RX MEDLINE=88233945; PubMed=3287330;
RA Tada M., Fukamizu A., Seo M.S., Takahashi S., Murakami K.;
RT "Nucleotide sequence of rat renin cDNA.";
RL Nucleic Acids Res. 16:3576-3576(1988).
RN [2]
   SEQUENCE FROM N.A.
RC MEDLINE=87289653; PubMed=3039496;
RX Burnham C.E., Hawelu-Johnson C.L., Frank B.M., Lynch K.R.;
RT "Molecular cloning of rat renin cDNA and its gene.";
RL Proc. Natl. Acad. Sci. U.S.A. 84:5605-5609(1987).
RN [3]
   SEQUENCE FROM N.A.
RC STRAIN=Sprague-Dawley;
RX MEDLINE=88332979; PubMed=3047403;
RA Fukamizu A., Nishi K., Cho T., Saichoh M., Nakayama K., Ohkubo H.,
RA Nakanishi S., Murakami K.;
RT "Structure of the rat renin gene.";
RL J. Mol. Biol. 201:443-450(1988).
RN [4]
   SEQUENCE FROM N.A.
RC MEDLINE=93258277; PubMed=8490598;
RX Alam K.Y., Wang Y., Dene H., Rapp J.P.;
RT "Renin gene nucleotide sequence of coding and regulatory regions in
RT Dahl rats.";
RL Clin. Exp. Hypertens. 15:599-614(1993).
CC -!- FUNCTION: Renin is a highly specific endopeptidase, whose only
CC known function is to generate angiotensin I from angiotensinogen
CC in the plasma, initiating a cascade of reactions that produce an
CC elevation of blood pressure and increased sodium retention by the
CC kidney.
CC -!- CATALYTIC ACTIVITY: Cleaves Leu|- bond in angiotensinogen to
CC generate angiotensin I.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to peptidase family A1.
-----
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CC
CC EMBL; BX640438; CAE30881.1; -
CC HAMAP; MF 00087; -; 1.
CC InterPro; IPR000343; GlutR.
CC Pfam; PF00745; GlutR_dimer; 1.
CC Pfam; PF05201; GlutR_N; 1.
CC Pfam; PF05200; GlutR_NAD_bind; 1.
CC TIGRfam; TIGR01035; hemA; 1.
CC PROSITE; PS00747; GLUTR; 1.
CC Porphylin biosynthesis; Oxidoreductase; NADP; Complete proteome.
CC ACT_SITE 54 54 NUCLEOPHILE (BY SIMILARITY).
CC ACT_SITE 101 101 BASE (BY SIMILARITY).
CC SEQUENCE 424 AA; 46735 MW; 3E9540D9435A8A27 CRC64;
CC
CC Query Match 3.8%; Score 7; DB 1; Length 424;
CC Best Local Similarity 100.0%; Pred. No. 38;
CC Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC
CC QY 8 EAAALRP 14
CC Db 82 EAAALRP 88
CC
CC RESULT 23
CC HEMI BORPA
CC ID HEMI BORPA STANDARD; PRT; 424 AA.
CC AC Q7WCE4;
CC DT 15-MAR-2004 (Rel. 43, Created)
CC DT 15-MAR-2004 (Rel. 43, Last sequence update)
CC DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC DE Glutamyl-tRNA reductase (EC 1.2.1.-) (GLUTR).
CC GNA OR BP0381.
CC OS Bordetella parapertussis.
CC OC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
CC OC Alcaligenaceae; Bordetella.
CC OX NCBI_TaxID=519;
CC RN [1]
CC RP SEQUENCE FROM N.A.
CC RC STRAIN=12822 / ATCC BAA-587;
CC RX MEDLINE=22827954; PubMed=12910271;
CC RA Parkhill J., Sebahia M., Preston A., Murphy L.D., Thomson N.,
CC Harris D.E., Holden M.T.G., Churcher C.M., Bentley S.D., Mungall K.L.,
CC Cerdano-Tarraga A.M., Temple L., James K., Harris B., Quail M.A.,
CC Achtman M., Atkin R., Baker S., Basham D., Bason N., Cherevach I.,
CC Chillingworth T., Collins M., Cronin A., Davis P., Doggett J.,
CC Feltham S., Goble A., Hamlin N., Hauser H., Holtroyd S., Jagers K.,
CC Leather S., Mouton S., Norberczak H., O'Neill S., Ormond D., Price C.,
CC Rabinowitsch E., Rutter S., Sanders M., Saunders R., Squares S., Stevens K.,
CC Sharp S., Simmonds M., Skelton J., Squares R., Squares S., Stevens K.,
CC Urwin L., Whitehead S., Barrell B.G., Maskell D.J.,
CC "Comparative analysis of the genome sequences of Bordetella pertussis,
CC Bordetella parapertussis and Bordetella bronchiseptica."
CC Nat. Genet. 35:32-40(2003).
CC CC -1- CATALYTIC ACTIVITY: Glutamyl-tRNA(Glu) + NADPH = glutamate-1-
CC semialdehyde + NADP(+) + TRNA(Glu).
CC CC -1- PATHWAY: Porphylin biosynthesis by the C5 pathway; first step.
CC CC -1- SIMILARITY: Belongs to the glutamyl-tRNA reductase family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; BX640412; CAE45003.1; -
CC HAMAP; MF 00087; -; 1.
CC InterPro; IPR000343; GlutR.
CC Pfam; PF00745; GlutR_dimer; 1.

CC or send an email to license@isb-sib.ch).
CC
CC EMBL; BX640424; CAE35965.1; -
CC HAMAP; MF 00087; -; 1.
CC InterPro; IPR000343; GlutR.
CC Pfam; PF00745; GlutR_dimer; 1.
CC Pfam; PF05201; GlutR_N; 1.
CC Pfam; PF05200; GlutR_NAD_bind; 1.
CC TIGRfam; TIGR01035; hemA; 1.
CC PROSITE; PS00747; GLUTR; 1.
CC Porphylin biosynthesis; Oxidoreductase; NADP; Complete proteome.
CC ACT_SITE 54 54 NUCLEOPHILE (BY SIMILARITY).
CC ACT_SITE 101 101 BASE (BY SIMILARITY).
CC SEQUENCE 424 AA; 46735 MW; 3E9540D9435A8A27 CRC64;
CC
CC Query Match 3.8%; Score 7; DB 1; Length 424;
CC Best Local Similarity 100.0%; Pred. No. 38;
CC Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC
CC QY 8 EAAALRP 14
CC Db 82 EAAALRP 88
CC
CC RESULT 24
CC HEMI BORPE
CC ID HEMI BORPE STANDARD; PRT; 424 AA.
CC AC Q7VRY3;
CC DT 15-MAR-2004 (Rel. 43, Created)
CC DT 15-MAR-2004 (Rel. 43, Last sequence update)
CC DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC DE Glutamyl-tRNA reductase (EC 1.2.1.-) (GLUTR).
CC GNA OR BP0677.
CC OS Bordetella pertussis.
CC OC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
CC OC Alcaligenaceae; Bordetella.
CC OX NCBI_TaxID=520;
CC RN [1]
CC RP SEQUENCE FROM N.A.
CC RC STRAIN=Tohama I / ATCC BAA-589 / NCTC 13251;
CC RX MEDLINE=22827954; PubMed=12910271;
CC RA Parkhill J., Sebahia M., Preston A., Murphy L.D., Thomson N.,
CC Harris D.E., Holden M.T.G., Churcher C.M., Bentley S.D., Mungall K.L.,
CC Cerdano-Tarraga A.M., Temple L., James K., Harris B., Quail M.A.,
CC Achtman M., Atkin R., Baker S., Basham D., Bason N., Cherevach I.,
CC Chillingworth T., Collins M., Cronin A., Davis P., Doggett J.,
CC Feltham S., Goble A., Hamlin N., Hauser H., Holtroyd S., Jagers K.,
CC Leather S., Mouton S., Norberczak H., O'Neill S., Ormond D., Price C.,
CC Rabinowitsch E., Rutter S., Sanders M., Saunders R., Squares S., Stevens K.,
CC Sharp S., Simmonds M., Skelton J., Squares R., Squares S., Stevens K.,
CC Urwin L., Whitehead S., Barrell B.G., Maskell D.J.,
CC "Comparative analysis of the genome sequences of Bordetella pertussis,
CC Bordetella parapertussis and Bordetella bronchiseptica."
CC Nat. Genet. 35:32-40(2003).
CC CC -1- CATALYTIC ACTIVITY: Glutamyl-tRNA(Glu) + NADPH = glutamate-1-
CC semialdehyde + NADP(+) + TRNA(Glu).
CC CC -1- PATHWAY: Porphylin biosynthesis by the C5 pathway; first step.
CC CC -1- SIMILARITY: Belongs to the glutamyl-tRNA reductase family.
CC
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CC
CC EMBL; BX640412; CAE45003.1; -
CC HAMAP; MF 00087; -; 1.
CC InterPro; IPR000343; GlutR.
CC Pfam; PF00745; GlutR_dimer; 1.

DR Pfam; PF05201; GlutR N; 1.
 DR TIGRFAMS; TIGR01035; hemA; 1.
 DR PROSITE; PS00747; GLUTR; 1.
 KW Porphylin biosynthesis; Oxidoreductase; NADP; Complete proteome.
 FT ACT_SITE 54 NUCLEOPHILE (BY SIMILARITY).
 FT ACT_SITE 101 BASE (BY SIMILARITY).
 SQ SEQUENCE 424 AA; 46765 MW; 3E954CA8435A9F26 CRC64;
 Query Match 3.8%; Score 7; DB 1; Length 424;
 Best Local Similarity 100.0%; Pred. No. 38;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 8 EAAALRP 14
 DB 82 EAAALRP 88
 RESULT 25
 VTNC RABIT
 ID VTNC RABIT STANDARD; PRT; 475 AA.
 AC P22458;
 DT 01-AUG-1991 (Rel. 19, Created)
 DT 01-AUG-1991 (Rel. 19, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE Vitronectin precursor (Serum spreading factor) (S-protein)
 DE (Glycoprotein 66).
 GN VTN.
 OS Oryctolagus cuniculus (Rabbit).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
 OX NCBI_TaxID=9986;
 RN [1]
 RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RX MEDLINE=91065939; PubMed=1701177;
 RA Sato R., Kamine Y., Imanaka T., Takano T.;
 RT "Monoclonal antibody EMRIA/212D recognizing site of deposition of
 RT extracellular lipid in atherosclerosis. Isolation and
 RT characterization of a cDNA clone for the antigen.";
 RL J. Biol. Chem. 265:21232-21236(1990).
 CC -!- FUNCTION: VITRONECTIN IS A CELL ADHESION AND SPREADING FACTOR
 CC FOUND IN SERUM AND TISSUES. VITRONECTIN INTERACT WITH
 CC GLYCOSAMINOGLYCANS AND PROTEOGLYCANS. IS RECOGNIZED BY CERTAIN
 CC MEMBERS OF THE INTEGRIN FAMILY AND SERVES AS A CELL-TO-SUBSTRATE
 CC ADHESION MOLECULE. INHIBITOR OF THE MEMBRANE-DAMAGING EFFECT OF
 CC THE TERMINAL CYTOLYTIC COMPLEMENT PATHWAY.
 CC -!- SUBUNIT: Monomer.
 CC -!- SUBCELLULAR LOCATION: Extracellular.
 CC -!- TISSUE SPECIFICITY: Plasma.
 CC -!- PTM: Sulfated on 2 tyrosine residues (By similarity).
 CC -!- SIMILARITY: Contains 2 hemopexin-like domains.
 CC -!- SIMILARITY: Contains 1 somatomedin-B type domain.
 CC -----
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 CC -----
 CC EMBL; M55442; AAA31258.1; -.
 CC PIR; A30340; A38340.
 CC HSSP; P45452; LPX8.
 DR InterPro; IPR000585; Hemopexin.
 DR InterPro; IPR001212; Somatomedin_B.
 DR Pfam; PF00045; hemopexin; 4.
 DR Pfam; PF01033; Somatomedin_B; 1.
 DR PRINTS; PR00022; SOMATOMEDINB.
 DR SMART; SMC0120; HX; 4.
 DR SMART; SMC0201; SO; 1.
 DR PROSITE; PS00024; HEMOPEXIN; 2.
 DR PROSITE; PS00524; SOMATOMEDIN_B; 1.

KW Heparin-binding; Cell adhesion; Glycoprotein; Sulfation; Repeat;
 KW Signal.
 FT CHAIN 1 19
 FT CHAIN 20 475
 FT DOMAIN 20 63
 FT DOMAIN 150 287
 FT DOMAIN 288 475
 FT DOMAIN 366 392
 FT SITE 64 66
 FT DISULFID 24 28
 FT DISULFID 38 40
 FT DISULFID 44 50
 FT DISULFID 51 58
 FT MOD_RES 75 75
 FT MOD_RES 78 78
 FT MOD_RES 80 80
 FT MOD_RES 279 279
 FT MOD_RES 282 282
 FT CARBOHYD 87 87
 FT CARBOHYD 169 169
 FT CARBOHYD 242 242
 SQ SEQUENCE 475 AA; 53943 MW; D5D1F31B8C2FA12D CRC64;
 Query Match 3.8%; Score 7; DB 1; Length 475;
 Best Local Similarity 100.0%; Pred. No. 42;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 17 LALLLWV 23
 DB 10 LALLLWV 16
 RESULT 26
 KALM CHICK
 ID KALM CHICK STANDARD; PRT; 676 AA.
 AC P33005;
 DT 01-OCT-1993 (Rel. 27, Created)
 DT 01-OCT-1993 (Rel. 27, Last sequence update)
 DT 28-FEB-2003 (Rel. 41, Last annotation update)
 DE Anosmin 1 precursor (Kallmann syndrome protein homolog).
 GN KAL.
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OX NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=94010957; PubMed=8406507;
 RA Legouis R., Cohen-Salmon M., del Castillo I., Levilliers J.,
 RA Capy L., Mornon J.-P., Petit C.;
 RT "Characterization of the chicken and quail homologues of the human
 RT gene responsible for the X-linked Kallmann syndrome.";
 RL Genomics 17:516-518(1993).
 CC -!- FUNCTION: May be an adhesion-like molecule with anti-protease
 CC activity.
 CC -!- SUBCELLULAR LOCATION: Secreted. Localized at cell surface (By
 CC similarity).
 CC -!- SIMILARITY: Contains 4 fibronectin type III domains.
 CC -!- SIMILARITY: Contains 1 WAP-type domain.
 CC -----
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 CC -----
 CC EMBL; L12144; AAA51435.1; -.
 CC PIR; B47222; B47222.
 CC HSSP; P19957; 2REL.


```

DR InterPro; IPR008957; FN_III-like.
DR InterPro; IPR003961; FN_III.
DR InterPro; IPR008197; WAP.
DR Pfam; PF00041; fn3; 3.
DR Pfam; PF00095; wap; 1.
DR PRINTS; PR00003; 4DISULPHCORE.
DR SMART; SM00060; WAP; 1.
DR SMART; SM00217; FN3; 3.
DR Cell adhesion; Glycoprotein; Serine protease inhibitor; Repeat;
KW SIGNAL.
FT CHAIN 1 21 POTENTIAL.
FT CHAIN 22 676 ANOSMIN 1.
FT DOMAIN 22 115 *CYSTEINE BOX".
FT DOMAIN 125 171 WAP.
FT DOMAIN 176 280 FIBRONECTIN TYPE-III 1.
FT DOMAIN 281 397 FIBRONECTIN TYPE-III 2.
FT DOMAIN 398 536 FIBRONECTIN TYPE-III 3.
FT DOMAIN 537 657 FIBRONECTIN TYPE-III 4.
FT CARBOHYD 66 66 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 204 204 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 295 295 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 466 466 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 549 549 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 560 560 N-LINKED (GLCNAC. .) (POTENTIAL).
SQ SEQUENCE 676 AA; 76375 MW; 3FAC7ED82EA7E352 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 676;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 17 LALLLV 23
Db 11 LALLLV 17

RESULT 27
DVL1 MOUSE
ID DVL1 MOUSE STANDARD; PRT; 695 AA.
AC PS1141; O60868;
DC 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Segment polarity protein dishevelled homolog DVL-1 (Dishevelled-1)
DE (DSH homolog 1).
DE DVL1 OR DVL.
GN Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Xuridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RN [2]
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6; TISSUE=Brain;
RX MEDLINE=95046319; PubMed=7958461;
RA Sussman D.J., Klingensmith J., Salinas P., Adams P.S., Nusse R.,
RA Ferrirom N.;
RT "Isolation and characterization of a mouse homolog of the Drosophila
RT segment polarity gene dishevelled.";
RL Dev. Biol. 166:73-86(1994).
RN [2].
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/c;
RX MEDLINE=96232916; PubMed=9132266;
RA Lijam N., Sussman D.J.;
RT "Organization and promoter analysis of the mouse dishevelled-1 gene.";
RL Genome Res. 5:116-124(1995).
RN [3].
RP KNOCK-OUT.
RX MEDLINE=97442352; PubMed=9298901;
RA Lijam N., Paylor R., McDonald M.P., Crawley J.N., Deng C.-X.,
RA Herrup K., Stevens K.E., Maccaferri G., McBain C.J., Sussman D.J.,
RA Wynshaw-Boris A.;
RT "Social interaction and sensorimotor gating abnormalities in mice
lacking Dvl1.";
RL Cell 90:895-905(1997).
-!- FUNCTION: May play a role in the signal transduction pathway
mediated by multiple Wnt genes. DVL1 deficient mice display
abnormalities in social behaviors and sensorimotor gating.
-!- SUBCELLULAR LOCATION: Cytoplasmic (potential).
-!- TISSUE SPECIFICITY: High levels are seen in the brain, testis and
kidney, and very low levels are seen in the spleen and thymus.
A moderate level expression is seen in the heart.
-!- DEVELOPMENTAL STAGE: Is expressed throughout the embryonic central
nervous system from presomite stages and in neuron-rich areas of
the brain throughout postnatal development, as well as in many
other tissues.
-!- SIMILARITY: Contains 1 DEP domain.
-!- SIMILARITY: Contains 1 PDZ/DHR domain.
-!- SIMILARITY: Belongs to the DSH family.
-!- SIMILARITY: Contains 1 DIX domain.

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EMBL; U10115; AAA82175.1; -
EMBL; U28138; AAA74049.1; -
DR PDB; 1FSH; 31-DEC-02.
DR MGD; MGI:94941; DVL1.
DR GO; GO:0016023; C:cytoplasmic vesicle; IDA.
DR InterPro; IPR000591; DEP.
DR InterPro; IPR008339; Dishevell.
DR InterPro; IPR003351; Dishevelled.
DR InterPro; IPR008340; Dishevelled_1.
DR InterPro; IPR001158; DIX.
DR InterPro; IPR001478; PDZ.
DR Pfam; PF00610; DEP; 1.
DR Pfam; PF02377; Dishevelled; 1.
DR Pfam; PF00778; DIX; 1.
DR Pfam; PF00595; PDZ; 1.
DR PRINTS; PR01760; DISHEVELLED.
DR PRINTS; PR01761; DISHEVELLED1.
DR PRODOM; PD003639; DIX; 1.
DR SMART; SM00021; DAX; 1.
DR SMART; SM00049; DEP; 1.
DR SMART; SM00228; PDZ; 1.
DR PROSITE; PS50186; DEP; 1.
DR PROSITE; PS50841; DIX; 1.
DR PROSITE; PS50106; PDZ; 1.
KW Wnt signaling pathway; Developmental protein; 3D-structure.
FT DOMAIN 1 85 DIX.
FT DOMAIN 251 323 PDZ.
FT DOMAIN 425 499 DEP.
FT DOMAIN 390 393 POLY-SER.
FT CONFLICT 122 125 MISSING (IN REF. 2).
FT CONFLICT 211 211 T -> N (IN REF. 2).
SQ SEQUENCE 695 AA; 75350 MW; A9FA449F95CF75F2 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 695;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 87 LGLPPDS 93
Db 171 LGLPPDS 177

RESULT 28
DVL1 RAT
ID DVL1 RAT STANDARD; PRT; 695 AA.
AC Q9WVB9; Q9QUG5; Q9WVB6;

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30-MAY-2000 (Rel. 39, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
15-MAR-2004 (Rel. 43, Last annotation update)
Segment polarity protein dishevelled homolog DVL-1 (Dishevelled-1)
(DSH homolog 1).
DVL1.
Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OC NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Wistar Kyoto;
RX MEDLINE=21254118; PubMed=11354832;
RA de Lange R.P.J., Burr K., Clark J.S., Negrin C.D., Brosnan M.J.,
RA St Clair D.M., Dominiczak A.F., Shaw D.J.;
RT "Mapping and sequencing rat dishevelled-1: a candidate gene for
RT cerebral ischaemic insult in a rat model of stroke.";
RL Neurogenetics 3:99-106(2001).
CC -!- FUNCTION: May play a role in the signal transduction pathway
CC mediated by multiple Wnt genes.
CC -!- SUBCELLULAR LOCATION: Cytoplasmic (Potential).
CC -!- SIMILARITY: Belongs to the DSH family.
CC -!- SIMILARITY: Contains 1 DEP domain.
CC -!- SIMILARITY: Contains 1 PDZ/DRH domain.
CC -!- SIMILARITY: Contains 1 DIX domain.
CC
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CC
CC -----
CC EMBL; AF143545; AAD33896.2; -
CC DR EMBL; AF143546; AAD33897.2; -
CC DR EMBL; AF143548; AAD41492.2; -
CC DR EMBL; AF143547; AAD41492.2; JOINED.
CC DR EMBL; AF143550; AAD41493.1; -
CC DR EMBL; AF143549; AAD41493.1; JOINED.
CC DR InterPro; IPR000591; DEP.
CC DR InterPro; IPR008339; Dishevell.
CC DR InterPro; IPR003351; Dishevelled.
CC DR InterPro; IPR008340; Dishevelled_1.
CC DR InterPro; IPR001158; DIX.
CC DR InterPro; IPR001478; PDZ.
CC DR Pfam; PF02610; DEP; 1.
CC DR Pfam; PF02377; Dishevelled; 1.
CC DR Pfam; PF02778; DIX; 1.
CC DR Pfam; PF00595; PDZ; 1.
CC DR PRINTS; PR01760; DISHEVELLED.
CC DR PRINTS; PR01761; DISHEVELLED1.
CC DR ProDom; PD003639; DIX; 1.
CC DR SMART; SM00021; DAX; 1.
CC DR SMART; SM00049; DEP; 1.
CC DR SMART; SM0228; PDZ; 1.
CC DR PROSITE; PS50186; DEP; 1.
CC DR PROSITE; PS50841; DIX; 1.
CC DR PROSITE; PS50106; PDZ; 1.
CC DR Wnt signaling pathway; Developmental protein.
FT DOMAIN 1 85 DIX.
FT DOMAIN 251 323 PDZ.
FT DOMAIN 425 499 DEP.
SQ SEQUENCE 695 AA; 75447 MW; EEC4AA99A117D22A CRC64;

Query Match 3.8%; Score 7; DB 1; Length 695;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 87 LGLPPDS 93
Db 171 LGLPPDS 177

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RESULT 29
COAT SMSV1 STANDARD; PRT; 702 AA.
ID COAT SMSV1 STANDARD; PRT; 702 AA.
AC P36284;
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DT 15-DEC-1998 (Rel. 37, Last annotation update)
DE Coat protein (Capsid protein).
OS San Miguel sea lion virus (serotype 1) (SMSV 1).
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Caliciviridae;
OC Vesivirus.
OX NCBI_TaxID=36406;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92410750; PubMed=1529644;
RA Neill J.D.;
RT "Nucleotide sequence of the capsid protein gene of two serotypes of
RT San Miguel sea lion virus: identification of conserved and non-
RT conserved amino acid sequences among calicivirus capsid proteins.";
RL Virus Res. 24:211-222(1992).
CC -!- SIMILARITY: TO CAPSID PROTEIN OF OTHER CALICIVIRUSES.
CC
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CC
CC -----
CC EMBL; M87481; AAA16217.1; -
CC DR PIR; A48562; A48562.
CC DR InterPro; IPR004005; Calici_coat.
CC DR InterPro; IPR008975; Viral_cap_coat.
CC DR Pfam; PF00915; Calici_coat; 1.
CC KW Coat protein; Glycoprotein.
CC FT CARBOHYD 208 208 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT CARBOHYD 481 481 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT CARBOHYD 493 493 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC FT CARBOHYD 545 545 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC SQ SEQUENCE 702 AA; 77850 MW; E6E5A58523DEE3D7 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 702;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 89 LPPDSLL 95
Db 635 LPPDSLL 641

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RESULT 30
NFC1 MOUSE STANDARD; PRT; 717 AA.
ID NFC1 MOUSE STANDARD; PRT; 717 AA.
AC O88942; O70345;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Nuclear factor of activated T-cells, cytoplasmic 1 (NFAT transcription
DE complex cytosolic component) (NF-ATc1) (NF-ATc).
GN NFATC1 OR NFATC OR NFAT2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM BETA).
RX MEDLINE=98049829; PubMed=9388475;
RA Pan S., Koyano-Nakagawa N., Tsuruta L., Amasaki Y., Yokota T.,
RA Mori S., Arai N., Arai K.-I.;
RT "Molecular cloning and functional characterization of murine cDNA

```

DR	GO; GO:0005634; C:nucleus; IDA.
DR	GO; GO:0003677; F:DNA binding; IDA.
DR	InterPro; IPR007110; Ig-like
DR	InterPro; IPR002909; IPT_TIG
DR	InterPro; IPR000451; NF_Rel_dor.
DR	InterPro; IPR008366; NFAT.
DR	InterPro; IPR008967; P53-like.
DR	Pfam; PF00554; RHD; 1.
DR	Pfam; PF01833; TIG; 1.
DR	PRINTS; PR01789; NUCFACTORATC.
DR	SMART; SM00429; IPT_1.
DR	PROSITE; PS01204; REL_1; FALSE_NEG.
DR	PROSITE; PS0254; REL_2; 1.
KW	Transcription regulation; Activator; Nuclear protein; DNA-binding;
KW	Alternative initiation; Alternative splicing; Phosphorylation; Repeat;
FT	CHAIN 1 717
FT	CTOPLASMIC 1.
FT	NUCLEAR FACTOR OF ACTIVATED T-CELLS,
FT	NUCLEAR FACTOR OF ACTIVATED T-CELLS,
FT	CYTOSOLIC 1, ISOFORM ALPHA-TYPE.
FT	FOR ISOFORM ALPHA-TYPE.
FT	DOMAIN 120 125
FT	DOMAIN 128 220
FT	DOMAIN 205 300
FT	REPEAT 205 221
FT	REPEAT 235 251
FT	REPEAT 284 300
FT	DOMAIN 267 269
FT	DOMAIN 312 323
FT	DOMAIN 440 447
FT	DOMAIN 683 685
FT	MOD RES 119 119
FT	VARSPLIC 1 42
FT	E -> MTGLEQDPEDFDLFEFDQSGGAAA {in
FT	isoform Beta}.
FT	/FTID=VSP 3055594.
SQ	SEQUENCE 717 AA; 77833 MW; 58837C6CC085268D CRC64;
	Query Match 3.8%; Score 7; DB 1; Length 717;
	Best Local Similarity 100.0%; Pred.No. 61;
	Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps
QY	33 PASSLESS 39
DB	175 PASSLESS 181
RESULT 31	
ID	BRD2_HUMAN STANDARD; PRT; 801 AA.
AC	P25440; O00699; O00700; Q15310; Q969U4;
DT	01-MAY-1992 (Rel. 22, Created)
DT	16-OCT-2001 (Rel. 40, Last sequence update)
DT	28-FEB-2003 (Rel. 41, Last annotation update)
DE	Bromodomain-containing protein 2 (RING3 protein) (O27.L1).
GN	HMO OR RING3 OR KIAA9001.
OS	Homo sapiens (Human).
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX	NCBI_Taxid=9606;
RN	[1]
RP	SEQUENCE FROM N.A.
RC	TISSUE=T-cell;
RX	MEDLINE=92329974; PubMed=1352711;
RA	Beck S., Hanson L., Kelly A.; Pappin D.J.C.; Townsdales J.;
RT	"A homologue of the Drosophila female sterile homeotic (fsh) gene in
RT	the class II region of the human MHC.";
RNA	DNA Seq. 2:203-210(1992).
RN	[2]
REV	REVISIONS TO N-TERMINUS.
RP	MEDLINE=96376536; PubMed=8781126;
RA	Thorpe K.L.; Abullia S.; Kaufman J.; Townsdales J.; Beck S.;
RL	"Phylogeny and structure of the RING3 gene."
RL	Immunogenetics 44:391-396(1996).


```
FT DOMAIN 429 436 DNA-BINDING.
FT DOMAIN 672 674 NUCLEAR LOCALIZATION SIGNAL.
FT MOD RES 109 109 PHOSPHORYLATION (BY SIMILARITY).
SQ SEQUENCE 822 AA; 88009 MW; C891D851B3644833 CRC64;

Query Match 3.8%; Score 7; DB 1; Length 822;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLS 39
Db 165 PASSLS 171

RESULT 33
HEX ADECC STANDARD; PRT; 905 AA.
AC Q65955;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DE Hexon protein (Late protein 2).
GN PII.
OS Canine adenovirus type 1 (strain CLL).
CC Viruses; dsDNA viruses, no RNA stage; Adenoviridae; Mastadenovirus.
CX NCBI_TaxID=69150;
RN [-]
RP SEQUENCE FROM N.A.
RA Campbell J.B., Zhao Y.;
RL Submitted (AUG-1996) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: This protein is one of the structural proteins in the
CC viral coat and is synthesized during late infection.
CC -!- SUBUNIT: Homotrimer (By similarity).
CC
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CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; Y07760; CAA69066.1; --
DR HSSP; P03277; IDHX.
DR InterPro; IPR000736; Adeno_hexon.
DR Pfam; PF01065; Adeno_hexon; 1.
DR ProDom; PD002815; Adeno_hexon; 1.
DR ProDom; PD002815; Adeno_hexon; 1.
KW Coat protein; Hexon protein; Late protein.
SQ SEQUENCE 905 AA; 101353 MW; 6F95A0C1BB1B10CA CRC64;

Query Match 3.8%; Score 7; DB 1; Length 905;
Best Local Similarity 100.0%; Pred. No. 75;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 EPQLGPE 8
Db 170 EPQLGPE 176

RESULT 35
NFCL HUMAN STANDARD; PRT; 943 AA.
AC Q95644; Q12865; Q15793;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Nuclear factor of activated T-cells, cytoplasmic 1 (NFAT transcription
DE complex cytosolic component) (NF-ATc1) (NF-ATc).
GN NFATC1 OR NFATC OR NFAT2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM A-ALPHA).
RC TISSUE=Peripheral blood lymphocytes, and T-cell;
RX MEDLINE=94261186; PubMed=8202141;
RA Northrop J.P., Ho S.N., Chen L., Thomas D.J., Timmerman L.A.,
RA Nolan G.P., Admon A., Crabtree G.R.;
RT "NF-AT components define a family of transcription factors targeted in
RT T-cell activation.";
RL Nature 369:497-502(1994).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM B-BETA).
RC TISSUE=B-cell;
RX MEDLINE=96355439; PubMed=8702849;
RA Park J., Takeuchi A., Sharma S.;
RT "Characterization of a new isoform of the NFAT (nuclear factor of
RT activated T cells) gene family member NFATc.";
RL J. Biol. Chem. 271:20914-20921(1996).
RN [3]
RP ERRATUM.
RA Park J., Takeuchi A., Sharma S.;
RL J. Biol. Chem. 271:33705-33705(1996).
RN [4]
RP SEQUENCE FROM N.A. (ISOFORMS A-ALPHA; B-ALPHA AND C-BETA).
RC TISSUE=B-cell lymphoma;
```

RX MEDLINE=99170294; PubMed=10072078;
 RA Chuvpilo S., Zimmer M., Kerstan A., Gloeckner J., Avots A., Escher C.,
 RA Fischer C., Inashkina I., Jankevics E., Berberich-Siebelt F.,
 RA Schmitt E., Serfling E.;
 RT "Alternative polyadenylation events contribute to the induction of
 RT NF-ATc in effector T cells.";
 RL Immunity 10:261-269(1999).
 RN [5]
 RP MUTAGENESIS.
 RX MEDLINE=20119316; PubMed=10652349;
 RA Porter C.M., Havens M.A., Clipstone N.A.;
 RA "Identification of amino acid residues and protein kinases involved in
 RT the regulation of NFATc subcellular localization.";
 RL J. Biol. Chem. 275:3543-3551(2000).
 RN [6]
 RP ALTERNATIVE SPLICING, AND CHARACTERIZATION.
 RX MEDLINE=9928090; PubMed=10358178;
 RA Chuvpilo S., Avots A., Berberich-Siebelt F., Gloeckner J., Fischer C.,
 RA Kerstan A., Escher C., Inashkina I., Hlubek F., Jankevics E.,
 RA Brabletz T., Serfling E.;
 RT "Multiple NF-ATc isoforms with individual transcriptional properties
 RT are synthesized in T lymphocytes.";
 RL J. Immunol. 162:7294-7301(1999).
 RN [7]
 RP REVIEW.
 RX MEDLINE=99189746; PubMed=10089876;
 RA Crabtree G.R.;
 RA "Generic signals and specific outcomes: signaling through Ca2+,
 RT calcineurin, and NF-AT.";
 RL Cell 96:611-614(1999).
 CC -!- FUNCTION: Plays a role in the inducible expression of cytokine
 CC genes in T cells, especially in the induction of the IL-2 or IL-4
 CC gene transcription. Also control gene expression in embryonic
 CC cardiac cells. Could regulate not only the activation and
 CC proliferation but also the differentiation and programmed death of
 CC T-lymphocytes as well as lymphoid and non-lymphoid cells.
 CC -!- SUBUNIT: Member of the multicomponent NFATC transcription complex
 CC that consists of at least two components, a pre-existing
 CC cytoplasmic component NFATC2 and an inducible nuclear component
 CC NFATC1. Other members such as NFATC4, NFATC3 or members of the
 CC activating protein-1 family, MAP, GATA4 and Cbp/p300 can also bind
 CC the complex. NFATC proteins bind to DNA as monomers.
 CC -!- SUBCELLULAR LOCATION: Cytoplasmic for the phosphorylated form and
 CC nuclear after activation that is controlled by calcineurin-
 CC mediated dephosphorylation. Rapid nuclear exit of NFATC is thought
 CC to be one mechanism by which cells distinguish between sustained
 CC and transient calcium signals. The subcellular localization of
 CC NFATC play a key role in the gene transcription.
 CC -!- ALTERNATIVE PRODUCTS:
 CC Event=Alternative splicing; Named isoforms=6;
 CC Comment=Isoform C-alpha and isoform C-beta are the strongest
 CC activator of gene transcription, followed by isoform A-alpha and
 CC isoform A-beta, whereas isoform B-alpha and isoform B-beta are
 CC the weakest. Isoform B-alpha, isoform B-beta, isoform C-alpha
 CC and isoform C-beta, both present in T-cells, can modulate their
 CC transcriptional activity;
 CC Name=C-alpha;
 CC IsoId=O95644-1; Sequence=Displayed;
 CC Note=An additional isoform may be produced by alternative
 CC initiation at Met-37 of isoform C-alpha;
 CC Name=A-alpha;
 CC IsoId=O95644-2; Sequence=VSP_005591, VSP_005592;
 CC Note=An additional isoform may be produced by alternative
 CC initiation at Met-37 of isoform A-alpha;
 CC Name=B-alpha;
 CC IsoId=O95644-3; Sequence=VSP_005590, VSP_005591, VSP_005592;
 CC Note=An additional isoform may be produced by alternative
 CC initiation at Met-37 of isoform B-alpha;
 CC Name=B-beta;
 CC IsoId=O95644-4; Sequence=VSP_005593;
 CC Note=An additional isoform may be produced by alternative
 CC initiation at Met-37 of isoform B-alpha;
 CC Name=C-beta;
 CC IsoId=O95644-5; Sequence=VSP_005590, VSP_005593;
 CC Name=C-beta;
 CC
 CC IsoId=O95644-6; Sequence=VSP_005590;
 CC Event=Alternative initiation;
 CC Comment=6 isoforms may be produced by alternative initiation at
 CC Met-1 and Met-37 of alpha-type isoforms; peripheral leukocytes as
 CC TISSUE SPECIFICITY: Expressed in thymus, peripheral leukocytes as
 CC T-cells and spleen. Isoforms A are preferentially expressed in
 CC effector T-cells (thymus and peripheral leukocytes) whereas
 CC isoforms B and isoforms C are preferentially expressed in naive T-
 CC cells (spleen). Isoforms B are expressed in naive T-cells after
 CC first antigen exposure and isoforms A are expressed in effector T-
 CC cells after second antigen exposure.
 CC -!- INDUCTION: Only isoforms A are inducibly expressed in T
 CC lymphocytes upon activation of the T-cell receptor (TCR) complex.
 CC Induced after co-addition of phorbol 12-myristate 13-acetate (PMA)
 CC and ionomycin. Also induced after co-addition of 12-O-
 CC tetradecanoylphorbol-13-acetate (TPA) and ionomycin. Weakly
 CC induced with PMA, ionomycin and cyclosporin A.
 CC -!- DOMAIN: Rel Similarity Domain (RSD) allows DNA-binding and
 CC cooperative interactions with AP1 factors.
 CC -!- DOMAIN: The N-terminal transactivation domain (TAD-A) binds to and
 CC is activated by Cbp/p300. The dephosphorylated form contains two
 CC unmasked nuclear localization signals (NLS), which allow
 CC translocation of the protein to the nucleus.
 CC -!- DOMAIN: Isoforms C have a C-terminal part with an additional
 CC trans-activation domain, TAD-B, which acts as a transcriptional
 CC activator. Isoforms B have a shorter C-terminal part without
 CC complete TAD-B which acts as a transcriptional repressor.
 CC -!- PTM: Phosphorylated by NFATC-kinase; dephosphorylated by
 CC calcineurin.
 CC -!- SIMILARITY: Belongs to the Rel/Dorsal family.
 CC
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 CC
 CC EMBL: U08015; AAA19601.1; -;
 CC EMBL: U59736; AAC50869.1; -;
 CC EMBL: U80917; RAD00450.1; -;
 CC EMBL: U80918; RAD00451.1; -;
 CC EMBL: U80919; RAD00452.1; -;
 CC PDB: 1A66; 17-JUN-98.
 CC PDB: 1NEA; 01-APR-97.
 CC TRANSPAC; T01945; -;
 CC TRANSPAC; T05544; -;
 CC TRANSPAC; T05545; -;
 CC Genew; HGNC:7775; NFATC1.
 CC MIM: 600489; -;
 CC GO: GO:0005737; C:cytoplasm; TAS.
 CC GO: GO:0005528; F:PKS6 binding; TAS.
 CC GO: GO:0003700; F:transcription factor activity; TAS.
 CC GO: GO:0006366; F:transcription from Pol II promoter; TAS.
 CC InterPro: IPR007110; Ig-like.
 CC InterPro: IPR002909; IPT TIG.
 CC InterPro: IPR000451; NF Rel_dor.
 CC InterPro: IPR008366; NFAT.
 CC InterPro: IPR008967; P53-like.
 CC Pfam: PF00554; RHD; 1.
 CC Pfam: PF01833; TIG; 1.
 CC PRINTS: PR01789; NUCFACTORATC.
 CC SMART: SM00429; IPT; 1.
 CC PROSITE: PS01204; REL_1; FALSE_NEG.
 CC PROSITE: PS0254; REL_2; 1.
 CC Transcription regulation; Activator; Repressor; Nuclear protein;
 CC DNA-binding; Alternative initiation; Alternative splicing;
 CC Phosphorylation; Repeat; 3D-structure.
 CC CHAIN 1 943 NUCLEAR FACTOR OF ACTIVATED T-CELLS,
 CC CYTOPLASMIC 1.
 CC CHAIN 37 943 CYTOPLASMIC 1, ALPHA-TYPE ISOFORMS.
 CC FT FT

Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu M., Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K., Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S., Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I., Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A., Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J., Birney E., Hayashizaki Y.;

Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs.*;

Nature 420:563-573 (2002).

[3]

TISSUE SPECIFICITY:

MEDLINE=22557181; PubMed=12670712;

Takaishi M., Ishisaki Z., Yoshida T., Takata Y., Huh N.-H.;

Expression of calmin, a novel developmentally regulated brain protein with calponin-homology domains.;

Brain Res. Mol. Brain Res. 112:146-152(2003).

CC -!- SUBCELLULAR LOCATION: Type IV membrane protein (Potential).

Cytoplasmic. Isoforms 1 and isoform 4 show a reticular pattern in the cytoplasm.

CC -!- ALTERNATIVE PRODUCTS:

Event=Alternative splicing; Named isoforms=4;

Name=1; Synonyms=Beta;

IsoId=Q8C5W0-1; Sequence=Displayed;

Name=2; Synonyms=Delta;

IsoId=Q8C5W0-2; Sequence=VSP_007766, VSP_007767;

Note=Lacks the transmembrane domain;

Name=3; Synonyms=Gamma;

IsoId=Q8C5W0-3; Sequence=VSP_007768, VSP_007769;

Note=Lacks the transmembrane domain;

Name=4; Synonyms=Alpha;

IsoId=Q8C5W0-4; Sequence=VSP_007770;

CC -!- TISSUE SPECIFICITY: Expressed in testis. Expressed during testis maturation process and in maturing spermatids. In brain, it is expressed in neurons of the hippocampus, cerebral cortex, and thalamus, Purkinje cells, and also in the choroid plexus and ependymal cells. Expressed predominantly in dendrites and cell bodies of the neurons, but not in axons. The level of expression increases during the period of maturation of the mouse brain after birth.

CC -!- SIMILARITY: Contains 1 actin-binding domain.

CC -!- SIMILARITY: Contains 2 calponin-homology (CH) domains.

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EMBL; AB047978; BAB59009.1; -

EMBL; AB059643; BAB59120.1; -

EMBL; AB059644; BAB59121.1; -

EMBL; AB059645; BAB59122.1; -

EMBL; AB059646; BAB59123.1; -

EMBL; AB059647; BAB59124.1; -

EMBL; AB059648; BAB59125.1; -

EMBL; AK077023; BAC36573.1; -

MGD; MGI:2136957; Clmn.

GO; GO:0005737; C:cytoplasm; IDA.

InterPro; IPR001589; Actbind actinin.

InterPro; IPR001715; Calponin-like.

Fam; PF00307; CH; 2.

SMART; SMC0033; CH; 2.

PROSITE; PS00019; ACTININ 1; 1.

PROSITE; PS00020; ACTININ 2; 1.

PROSITE; PS00021; CH; 2.

Actin-binding; Repeat; Transmembrane; Alternative splicing.

TRANSMEM 1027 1047

DOMAIN 1 288 ANCHOR FOR TYPE IV MEMBRANE PROTEIN (POTENTIAL)

DOMAIN 1 139 ACTIN-BINDING. CH 1.

RESULT 38
RTN4 HUMAN STANDARD; PRT: 1192 AA.
AC Q9NQC3, Q94962; Q9BXG5; Q9H212; Q9H313; Q9TQ42; Q9Y293; Q9Y2Y7;
AC Q9Y5U6;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2004 (Rel. 41, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Reticulon 4 (Neurite outgrowth inhibitor) (Nogo protein) (Foocen)
DE (Neuroendocrine-specific protein) (NSP) (Neuroendocrine specific
DE protein C homolog) (RTN-x) (Reticulon 5) (Myo43 protein).
GN RTN4 OR NOGO OR ASY OR KIA0886.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
CX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1; 2 AND 3).
RX MEDLINE=2023242; PubMed=10667780;
RA Prinjha R., Moore S.E., Vinson M., Blake S., Morrow R., Christie G.,
RA Michalovich D., Simmons D.L., Walsh F.S.;
RT "Inhibitor of neurite outgrowth in humans.";
RL Nature 403:383-384(2000).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2).
RX TISSUE=Brain;
RX MEDLINE=21010696; PubMed=11126360;
RA Tagami S., Eguchi Y., Kinoshita M., Takeda M., Tsujimoto Y.;
RT "A novel protein, RTN-XS, interacts with both Bcl-XL and Bcl-2 on
RT endoplasmic reticulum and reduces their anti-apoptotic activity.";
RL Oncogene 19:5736-5746(2000).
RN [3]
RP SEQUENCE FROM N.A. (ISOFORMS 1; 2 AND 3).
RX MEDLINE=20237542; PubMed=10773680;
RA Yang J., Yu L., Bi A.D., Zhao S.-Y.;
RT "Assignment of the human reticulon 4 gene (RTN4) to chromosome
RT 2p14--2p13 by radiation hybrid mapping.";
RL Cytogenet. Cell Genet. 88:101-102(2000).
RN [4]
RP SEQUENCE FROM N.A. (ISOFORM 4).
RA Jin W.-L., Ju G.;
RT "Developmentally-regulated alternative splicing in a novel Nogo-A.";
RL Submitted (NOV-2000) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A. (ISOFORMS 2 AND 3).
RX TISSUE=Placenta, and Skeletal muscle;
RA Ito T., Schwartz S.M.;
RT "Cloning of a member of the reticulon gene family in human.";
RL Submitted (FEB-1999) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A. (ISOFORM 2).
RX TISSUE=Fibroblast;
RA Yutsudo M.;
RT "Isolation of a cell death-inducing gene.";
RL Submitted (JUN-1998) to the EMBL/GenBank/DBJ databases.
RN [7]
RP SEQUENCE FROM N.A. (ISOFORM 3).
RX TISSUE=Pituitary;
RA Song H., Peng Y., Zhou J., Huang Q., Dai M., Mao Y.M., Yu Y., Xu X.,
RA Luo B., Hu R., Chen J.;
RT "Human neuroendocrine-specific protein C (NSP) homolog gene.";
RL Submitted (JUL-1998) to the EMBL/GenBank/DBJ databases.
RN [8]
RP SEQUENCE FROM N.A. (ISOFORM 3).
RA Gu J.-R., Wan D.F., Zhao X.T., Zhou X.M., Jiang H.O., Zhang P.P.,
RA Qin W.X., Huang Y., Qiu X.K., Qian L.F., He L.P., Li H.N., Yu Y.,
RA Yu J., Han L.H.;
RT "Novel human cDNA clone with function of inhibiting cancer cell
RT growth.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
RN [9]
RP SEQUENCE FROM N.A. (ISOFORM 1).
RX TISSUE=Brain;
RX MEDLINE=99156230; PubMed=10048485;
RA Nagase T., Ishikawa K.-I., Suyama M., Kikuno R., Hirosewa M.,
RA Miyajima N., Tanaka A., Kotani H., Nomura N., Ohara O.;
RT "Prediction of the coding sequences of unidentified human genes. XII.
RT The complete sequences of 100 new cDNA clones from brain which code
RL for large proteins in vitro.";
RN DNA Res. 5:355-364(1998).
RN [10]
RP SEQUENCE FROM N.A. (ISOFORMS 2 AND 3).
RX TISSUE=Brain, Ovary, Pancreas, Placenta, and Skeletal muscle;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.D., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Raha S.S., Loughran M.A., Peters G.J., Abramson R.D., Mullen S.J.,
RA Hopkins R.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldi M.P., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Huiyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Pahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whitling M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [11]
RP SEQUENCE FROM N.A. (ISOFORM 3).
RX MEDLINE=2049367; PubMed=11042152;
RA Zhang Q.-H., Ye M., Wu X.-Y., Ren S.-X., Zhao M., Zhao C.-J., Fu G.,
RA Shen Y., Fan H.-Y., Lu G., Zhong M., Xu X.-R., Han Z.-G., Zhang J.-W.,
RA Tao J., Huang Q.-H., Zhou J., Hu G.-X., Gu J., Chen S.-J., Chen Z.;
RT "Cloning and functional analysis of cDNAs with open reading frames for
RT 300 previously undefined genes expressed in CD34+ hematopoietic
RT stem/progenitor cells.";
RL Genome Res. 10:1546-1560(2000).
RN [12]
RP SEQUENCE OF 482-1192 FROM N.A. (ISOFORM 1/4).
RX TISSUE=Brain;
RA Mao Y.M., Xie Y., Zheng Z.H.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
RN [13]
RP SEQUENCE OF 186-1192 FROM N.A. (ISOFORM 1).
RX TISSUE=Testis;
RA Sha J.H., Zhou Z.M., Li J.M.;
RL Submitted (JAN-2001) to the EMBL/GenBank/DBJ databases.
RN [14]
RP TOPOLOGY.
RX TISSUE=Brain;
RX MEDLINE=20129259; PubMed=10667797;
RA Grandpre T., Nakamura F., Vartanian T., Strittmatter S.M.;
RT "Identification of the Nogo inhibitor of axon regeneration as a
RT Reticulon protein.";
RL Nature 403:439-444(2000).
RN [15]
RP FUNCTION.
RX TISSUE=Brain;
RX MEDLINE=21069055; PubMed=11201742;
RA Fournier A.E., Grandpre T., Strittmatter S.M.;
RT "Identification of a receptor mediating Nogo-66 inhibition of axonal
RT regeneration.";
RL Nature 409:341-346(2001).
RN [16]
RP REVIEW.
RX MEDLINE=2188956; PubMed=11891768;
RA Ng C.E.L., Tang B.L.;
RT "Nogos and the Nogo-66 receptor: factors inhibiting CNS neuron

RT regeneration.";
 RL J. Neurosci. Res. 67:559-565(2002).
 CC -!- FUNCTION: Potent neurite outgrowth inhibitor which may also help
 CC block the regeneration of the nervous central system in adults.
 CC Isoform 2 reduces the anti-apoptotic activity of Bcl-x1 and Bcl-2.
 CC This is likely consecutive to their change in subcellular
 CC location, from the mitochondria to the endoplasmic reticulum,
 CC after binding and sequestration.
 CC -!- SUBUNIT: Binds to RTN4R. Interacts with Bcl-x1 and Bcl-2.
 CC -!- SUBCELLULAR LOCATION: Integral membrane protein. Endoplasmic
 CC reticulum. Anchored to the membrane of the endoplasmic reticulum
 CC through 2 putative transmembrane domains.
 CC -!- ALTERNATIVE PRODUCTS:
 CC Event-Alternative splicing; Named isoforms=4;
 CC Name=1; Synonyms=RTN 4A, Nogo-A, RTN-XU;
 CC IsoId=Q9NQC3-1; Sequence=Displayed;
 CC Name=2; Synonyms=RTN 4B, Nogo-B, RTN-XS, Foccen-W;
 CC IsoId=Q9NQC3-2; Sequence=VSP_005655;
 CC Name=3; Synonyms=RTN 4C, Nogo-C, Foccen-S;
 CC IsoId=Q9NQC3-3; Sequence=VSP_005652, VSP_005653;
 CC Name=4;
 CC IsoId=Q9NQC3-4; Sequence=VSP_005654;
 CC -!- TISSUE SPECIFICITY: Isoform 1 is specifically expressed in brain
 CC and testis and weakly in heart and skeletal muscle. Isoform 2 is
 CC widely expressed excepted for the liver. Isoform 3 is expressed in
 CC brain, skeletal muscle and adipocytes. Isoform 4 is testis-
 CC specific.
 CC -!- SIMILARITY: Contains 1 reticulin domain.
 CC -!- CAUTION: Ref.11 sequence differs from that shown due to
 CC frame shifts in positions 1149 and 1156.
 CC -----
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 CC -----

Query Match 3.8%; Score 7; DB 1; Length 1192;
 Best Local Similarity 100.0%; Pred. No. 96;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 160 LPTDLVQ 166
 |||||
 Db 550 LPTDLVQ 556

RESULT 39

ID_UB4B HUMAN STANDARD; PRT: 1302 AA.
 AC Q95155; Q75169; Q95338; Q96Q04; Q9BYI7;
 DT 28-FEB-2003 (Rel. 41, Created)
 JT 28-FEB-2003 (Rel. 41, Last sequence update)

DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE Ubiquitin conjugation factor E4 B (Ubiquitin-fusion degradation
 DE protein 2) (Homologously deleted in neuroblastoma-1).
 GN UB34B OR UFD2 OR HDNB1 OR KIAA0684.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A. (ISOFORM 2), TISSUE SPECIFICITY, MUTAGENESIS OF
 RP ASP-109; ASP-121 AND ASP-123, AND CLEAVAGE BY CASPASES.
 RX MEDLINE=21661475; PubMed=11802788;
 RA Mahoney J.A., Odin J.A., White S.M., Shaffer D., Koff A.,
 RA Casciola-Rosen L., Rosen A.;
 RT "The human homologue of the yeast polyubiquitination factor Ufd2p is
 RT cleaved by caspase 6 and granzyme B during apoptosis.";
 RL Biochem. J. 361:587-595(2002).
 RN [2]
 RP SEQUENCE FROM N.A. (ISOFORM 1).
 RC TISSUE=Brain;
 RA Lubyova B., Onyango P., Kurzbauer R., Lummerstorfer J.A., Kleiner E.,
 RA Gardellin P., Willhoeft U., Weith A.;
 RL Submitted (JUN-1998) to the EMBL/GenBank/DBJ databases.
 RN [3]
 RP SEQUENCE FROM N.A. (ISOFORM 2).
 RC TISSUE=Substantia nigra;
 RA Kageyama H., Ohira M., Nakagawara A.;
 RT "Human ubiquitination factor E4/UFD2.";
 RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
 RN [4]
 RP SEQUENCE FROM N.A. (ISOFORM 3).
 RA Martin S.;
 RL Submitted (JUN-2001) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE OF 102-1302 FROM N.A. (ISOFORM 2).
 RX MEDLINE=98403880; PubMed=9734811;
 RA Ishikawa K.-I., Nagase T., Suyama M., Miyajima N., Tanaka A.,
 RA Kotani H., Nomura N., Ohara O.;
 RT "Prediction of the coding sequences of unidentified human genes. X.
 RT The complete sequences of 100 new cDNA clones from brain which can
 RT code for large proteins in vitro.";
 RL DNA Res. 5:169-176(1998).
 RN [6]
 RP SEQUENCE OF 1112-1302 FROM N.A.
 RA Barrow I.K.-P., Boguski M.S., Touchman J., Spencer F.;
 RL Submitted (AUG-1998) to the EMBL/GenBank/DBJ databases.
 CC -!- FUNCTION: Binds to the ubiquitin moieties of preformed conjugates
 CC and catalyzes ubiquitin chain assembly in conjunction with E1, E2,
 CC and E3 (By similarity).
 CC -!- SUBUNIT: Interacts with Vcp (By similarity).
 CC -!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
 CC -!- ALTERNATIVE PRODUCTS:
 CC Event-Alternative splicing; Named isoforms=3;
 CC Name=1;
 CC IsoId=Q95155-1; Sequence=Displayed;
 CC Name=2;
 CC IsoId=Q95155-2; Sequence=VSP_007102;
 CC Name=3;
 CC IsoId=Q95155-3; Sequence=VSP_007101, VSP_007102, VSP_007103;
 CC Note=No experimental confirmation available;
 CC -!- TISSUE SPECIFICITY: Highest expression in ovary, testis, heart and
 CC skeletal muscle. Expression is low in colon, thymus and peripheral
 CC blood leukocytes. Almost undetectable in lung and spleen.
 CC -!- PTM: Proteolytically cleaved by caspases during apoptosis. Cleaved
 CC efficiently at Asp-123 by caspase-6 and granzyme B. Cleaved with
 CC approximately 10-fold less efficiency at Asp-109 by caspase-3 and
 CC caspase-7.
 CC -!- SIMILARITY: BELONGS TO THE UBIQUITIN CONJUGATION FACTOR E4 FAMILY.
 CC -----
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Best Local Similarity 100.03; Pred. No. 95;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 FLGLDK 59
DB 42 FLGLDK 47

RESULT 44
YHT8 YEAST
ID YHT8 YEAST STANDARD; PRT; 114 AA.
AC P38841;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Hypothetical 12.8 kDa protein in ARO9-SPS100 intergenic region
DE precursor.
GN YHRL38C.
OS Saccharomyces cerevisiae (Baker's yeast).
OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
OX NCBI_TaxID=4932;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=S288C / AB972;
RX MEDLINE=94378003; PubMed=8091229;
RA Johnston M., Andrews S., Brinkman R., Cooper J., Ding H., Dover J.,
RA Du Z., Favellio A., Fulton L., Gattung S., Geisel C., Kirsten J.,
RA Kucaba T., Hallier L.W., Jier M., Johnston L., Langston V.,
RA Latreille P., Louis E.J., Macri C., Mardis E., Menezes S., Mouser L.,
RA Nham M., Rifkin L., Riles L., St Peter H., Trevisan E., Vaughan K.,
RA Vignati D., Wilcox L., Wohlman P., Waterston R., Wilson R.,
RA Vaudin M.;
RT *Complete nucleotide sequence of Saccharomyces cerevisiae chromosome
RT VIII.;
RL Science 265:2077-2082 (1994).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Sigma 1278B;
RA Houssaini I.I., Vissers S., Cartiaux M., Urrestarazu A.;
RA Submitted (JUN-1997) to the EMBL/GenBank/DBJ databases.
CC -!- SIMILARITY: TO YEAST PROTEASE B INHIBITOR 2 (PBI2).
CC
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CC
CC EMBL; U10398; AAB68418.1; -;
CC EMBL; Y13625; CAA73951.1; -;
CC PIR; S48982; S48982.
CC GeneOnline; 139455; -;
CC SGD; S000180; YHRL38C.
CC InterPro; IPR009020; Protease_inh.
CC SIGNAL 1 19 POTENTIAL.
FT CHAIN 20 114 HYPOTHETICAL PROTEIN YHRL38C.
SQ SEQUENCE 114 AA; 12752 MW; FF168CA45F2E417 CRC64;

Query Match 3.3%; Score 6; DB 1; Length 114;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLS 39
DB 19 ASSLS 24

RESULT 45
VG19_BPMU
ID VG19 BPMU STANDARD; PRT; 120 AA.
AC Q38646;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Hypothetical protein gpl9 (E19 protein).
GN 19 OR E19.
OS Bacteriophage Mu.
OC Viruses; dsDNA viruses, no RNA stage; Caudovirales; Myoviridae;
OC Mu-like viruses.
OX NCBI_TaxID=10677;
RN [1]
RP SEQUENCE FROM N.A.
RA Stoddard S.F., Howe M.M.;
RL Submitted (SEP-1987) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA Priess H., Brauer B., Schmidt C., Kamp D.;
RT "Sequence of the left end of Mu.";
RL (In) Symonds N., Toussaint A., van de Putte P., Howe M.M. (eds.);
RL Phage Mu, pp.277-296, Cold Spring Harbor Laboratory Press,
RL New York (1987).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=21920971; PubMed=11922669;
RA Morgan G.J., Hatfull G.F., Casjens S., Hendrix R.W.;
RT "Bacteriophage Mu genome sequence: analysis and comparison with
RT Mu-like prophages in Haemophilus, Neisseria and Deinococcus.";
RL J. Mol. Biol. 317:337-359 (2002).
CC
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CC
CC EMBL; Y00419; CAA68479.1; -;
CC EMBL; M64097; AAA32411.1; -;
CC EMBL; AF083977; AAF01096.1; -;
CC KW Hypothetical protein.
SQ SEQUENCE 120 AA; 13444 MW; 651D578C21BA2D80 CRC64;

Query Match 3.3%; Score 6; DB 1; Length 120;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLW 22
DB 18 LALLW 23

RESULT 46
NUM ARBLI
ID NUM ARBLI STANDARD; PRT; 125 AA.
AC Q33756;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE NADH-ubiquinone oxidoreductase chain 1 (EC 1.6.5.3) (fragment).
GN ND1.
OS Arabcia lixula (Black urchin).
OG Mitochondrion.
OC Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Echinozoa;
OC Echinoidea; Echinoidea; Echinacea; Arbacoidea; Arbacoidea; Arbacia.
OX NCBI_TaxID=7640;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=92017217; PubMed=1681410;
RA de Giorgi C., Lanave C., Musci M.D., Saccone C.;
RT "Mitochondrial DNA in the sea urchin Arabcia lixula: evolutionary
RT inferences from nucleotide sequence analysis.";
```

RL Mol. Biol. Evol. 8:515-529 (1991).
CC -!- CATALYTIC ACTIVITY: NADH + ubiquinone = NAD(+) + ubiquinol.
CC -!- SIMILARITY: Belongs to the complex I subunit 1 family.
CC -----
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CC -----
DR EMBL: M74840; AAA99052.1; --
DR InterPro: IPR001694; Resp_NADH_dhl.
DR Pfam: PF00146; NADHdh; 1.
DR PROSITE: PS00667; COMPLEX1_ND1_1; PARTIAL.
DR PROSITE: PS00668; COMPLEX1_ND1_2; PARTIAL.
KW Oxidoreductase; NAD; Ubiquinone; Mitochondrion; Transmembrane.
FT NON_TER 125 125
SQ SEQUENCE 125 AA; 13792 MW; 7820CB0C029FAAA46 CRC64;

Query Match 3.3%; Score 6; DB 1; Length 125;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLW 22
DB 86 LALLW 91

RESULT 47
SYGB NEIGO STANDARD; PRT; 126 AA.
ID SYGB NEIGO
AC Q50945;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 28-FEB-2003 (Rel. 41, Last annotation update)
DE Glycyl-tRNA synthetase beta chain (EC 6.1.1.14) (Glycine--tRNA ligase
DE beta chain) (GLYS) (Fragment).
GN GLYS.
OS Neisseria gonorrhoeae.
OC Bacteria; Proteobacteria; Betaproteobacteria; Neisseriales;
OC Neisseriaceae; Neisseria.
OX NCBI_TaxID=485;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC 33084 / F62;
RX MEDLINE=95053752; PubMed=7964493;
RA Gotschlich E.C.;
RT "Genetic locus for the biosynthesis of the variable portion of
RT Neisseria gonorrhoeae lipooligosaccharide.";
RL J. Exp. Med. 180:2181-2190 (1994).
CC -!- CATALYTIC ACTIVITY: ATP + glycine + tRNA(Gly) = AMP + diphosphate
CC + glycyl-tRNA(Gly).
CC -!- SUBUNIT: Tetramer of two alpha and two beta chains (By
CC similarity).
CC -!- SUBCELLULAR LOCATION: Cytoplasmic.
CC -!- SIMILARITY: Belongs to class-II aminoacyl-tRNA synthetase family.
CC -----
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CC -----
DR EMBL: U14554; AAA68008.1; --
DR HAMAP: MF_00255; 1.
DR InterPro: IPR006194; tRNA_synt_Gly.
DR PROSITE: PS00861; AA_TRNA_LIGASE_II_GLYAB; 1.
KW Aminoacyl-tRNA synthetase; Protein biosynthesis; Ligase; ATP-binding.
FT NON_TER 1 1

SQ SEQUENCE 126 AA; 13343 MW; C3913AD1A6591CF2 CRC64;

Query Match 3.3%; Score 6; DB 1; Length 126;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 7 PRAAAL 12
DB 11 PRAAAL 16

RESULT 48
V132 FOWPV STANDARD; PRT; 129 AA.
ID V132 FOWPV
AC P15914;
DT 01-APR-1990 (Rel. 14, Created)
DT 01-APR-1990 (Rel. 14, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Protein FFW132.
GN FFW132 OR FP6.
OS Fowlpox virus (FPV).
OC Viruses; dsDNA viruses, no RNA stage; Poxviridae; Chordopoxvirinae;
OC Avipoxvirus.
OX NCBI_TaxID=10261;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=FP-9 / Isolate HP-444;
RX MEDLINE=88258470; PubMed=2838574;
RA Binns M.M., Tomley F.M., Campbell J., Boursnell M.E.G.;
RT "Comparison of a conserved region in fowlpox virus and vaccinia virus
RT genomes and the translocation of the fowlpox virus thymidine kinase
RT gene.";
RL J. Gen. Virol. 69:1275-1283 (1988).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Salisbury;
RX MEDLINE=87321104; PubMed=2820129;
RA Drillion R., Spehner D., Villevall D., Lecocq J.P.;
RT "Similar genetic organization between a region of fowlpox virus DNA
RT and the vaccinia virus HindIII J fragment despite divergent location
RT of the thymidine kinase gene.";
RL Virology 160:203-209 (1987).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=20193820; PubMed=10729156;
RA Afonso C.L., Tulman E.R., Lu Z., Zsak L., Kutish G.F., Rock D.L.;
RT "The genome of fowlpox virus.";
RL J. Virol. 74:3815-3831 (2000).
CC -!- SIMILARITY: Belongs to the poxviruses L5 family.
CC -----
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CC -----
DR EMBL: D00320; BAA00229.1; --
DR EMBL: M17418; AAA66420.1; --
DR EMBL: AF198100; AAF44476.1; --
DR PIR: JS0226; WMVZP6.
DR InterPro: IPR006956; Pox_L5.
DR Pfam: PF04872; Pox_L5; 1.
SQ SEQUENCE 129 AA; 14745 MW; DB98CCC282E48A6B CRC64;

Query Match 3.3%; Score 6; DB 1; Length 129;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 72 FFKKEE 77
DB 45 FFKKEE 50

RESULT 49

ID ECC1 HALEL STANDARD; PRT; 130 AA.
 AC Q9ZEU6;
 DT 30-MAY-2003 (Rel. 39, Created)
 DT 30-MAY-2003 (Rel. 39, Last sequence update)
 DT 30-MAY-2003 (Rel. 39, Last annotation update)
 DE L-ectoine synthase.
 GN ECTC.
 OS Halomonas elongata.
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Oceanospirillales;
 OC Halomonadaceae; Halomonas.
 OX NCBI_TaxID=2746;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=DSM 3043;
 RX MEDLINE=99123891; PubMed=9924816;
 RA Canovas D., Vargas C., Calderon M.I., Ventosa A., Nieto J.J.;
 RT "Characterization of the genes for the biosynthesis of the compatible
 RT solute ectoine in the moderately halophilic bacterium Halomonas
 RT elongata DSM 3043.";
 RL Syst. Appl. Microbiol. 21:487-497(1998).
 RC !- FUNCTION: CYCLIC CONDENSATION OF GAMMA-N-ACETYL-ALPHA-GAMMA-
 CC DIAMINO BUTYRIC ACID (ADABA) TO ECTOINE.
 CC !- PATHWAY: Biosynthesis of ectoine (1,4,5,6-tetrahydro-2-methyl-4-
 CC pyrimidine carboxylic acid); last step.
 CC
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 CC
 DR EMBL; AJ011103; CAA09485.1; -;
 DR InterPro; IPR007113; Cupin_sup.
 SQ SEQUENCE 130 AA; 14824 MW; 3E0E0B30B1E761BE CRC64;

Query Match 3.3%; Score 6; DB 1; Length 130;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 146 RKTRRF 151

Db 10 RKTRRF 15

RESULT 50

ID FLHE_SALTY STANDARD; PRT; 130 AA.
 AC P40728;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE Flagellar protein flhE precursor.
 GN FLHE OR STM1912 OR STY2121 OR TQ965.
 OS Salmonella typhimurium, and
 OS Salmonella typhi.
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
 OC Enterobacteriaceae; Salmonella.
 OX NCBI_TaxID=602, 601;
 RN [1]
 RP SEQUENCE FROM N.A., AND SEQUENCE OF 17-25.
 RC SPECIES=S.typhimurium; STRAIN=KK1004;
 RX MEDLINE=95095932; PubMed=9002587;
 RA Minamino T., Iino T., Kutsukake K.;
 RT "Molecular characterization of the Salmonella typhimurium flhB operon
 RT and its protein products."
 RL J. Bacteriol. 176:7630-7637(1994).
 RN [2]

RP SEQUENCE FROM N.A.
 RC SPECIES=S.typhimurium; STRAIN=IT2 / SGSC1412 / ATCC 700720;
 RX MEDLINE=21534948; PubMed=11677609;
 RA McClelland M., Sanderson K.E., Spieth J., Clifton S.W., Latreille P.,
 RA Courtney L., Porwollik S., Ali J., Dante M., Du F., Hou S., Layman D.,
 RA Leonard S., Nguyen C., Scott K., Holmes A., Grewal N., Mulvaney E.,
 RA Ryan E., Sun H., Florea L., Miller W., Stoneking T., Nhan M.,
 RA Waterston R., Wilson R.K.;
 RT "Complete genome sequence of Salmonella enterica serovar Typhimurium
 RT LT2.";
 RL Nature 413:852-856(2001).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC SPECIES=S.typhi; STRAIN=CT18;
 RX MEDLINE=21534947; PubMed=11677608;
 RA Parkhill J., Dougan G., James K.D., Thomson N.R., Pickard D., Wain J.,
 RA Churcher C., Mungall K.L., Bentley S.D., Holden M.T.G., Sebahia M.,
 RA Baker S., Basham D., Brooks K., Chillingworth T., Connor P.,
 RA Cronin A., Davis P., Davies R.M., Dowd L., White N., Farrar J.,
 RA Feltwell T., Hamlin N., Haque A., Hien T.T., Holroyd S., Jagels K.,
 RA Krogh A., Larsen T.S., Leather S., Moule S., O'Gaora P., Parry C.,
 RA Quail M.A., Rutherford K., Simmonds M., Skelton J., Stevens K.,
 RA Whitehead S., Barrrell B.G.;
 RT "Complete genome sequence of a multiple drug resistant Salmonella
 RT enterica serovar Typhi CT18.";
 RL Nature 413:848-852(2001).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC SPECIES=S.typhi; STRAIN=Ty2 / ATCC 700931;
 RX MEDLINE=22531367; PubMed=12644504;
 RA Deng W., Liou S.-R., Plucknett G. III, Mayhew G.F., Rose D.J.,
 RA Burland V., Kodyonanni V., Schwartz D.C., Blattner F.R.;
 RT "Comparative genomics of Salmonella enterica serovar Typhi strains Ty2
 RT and CT18.";
 RL J. Bacteriol. 185:2330-2337(2003).
 CC !- FUNCTION: NOT ESSENTIAL FOR FLAGELLAR FORMATION AND FUNCTION.
 CC
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 CC
 DR EMBL; D32203; BAA06904.1; -;
 DR EMBL; AE008785; AAL20828.1; -;
 DR EMBL; AL627272; CAD05663.1; -;
 DR EMBL; AE016837; AAO68638.1; -;
 DR FTR; C55546; C55546.
 DR StyGene; SG10528; flhE.
 KW Flagellum; Signal; Complete proteome.
 FT SIGNAL
 FT CHAIN 17 130 FLAGELLAR PROTEIN FLHE
 SQ SEQUENCE 130 AA; 14073 MW; 13925A210E0F4C67 CRC64;

Query Match 3.3%; Score 6; DB 1; Length 130;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 16 WLALL 21

Db 4 WLALL 9

Search completed: June 14, 2004, 08:07:18
 Job time : 18 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 14, 2004, 08:02:41 ; Search time 41 Seconds
(without alignments)
1400.593 Million cell updates/sec

Title: US-10-054-988-114

Perfect score: 182

Sequence: 1 MEFQIGPEAAALPGWIAL.....DIVQDCHQGRHLKFLQMLR 182

Scoring table: OMIGO

Gapop 60.0 , Gapext 60.0

Searched: 1017041 seqs, 315318202 residues

Word size : 0

Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0

Maximum DB seq length: 2003000000

Post-processing: Listing first 100 summaries

Database :

SPTREMBL 25:*

1: sp_archaea:*

2: sp_bacteria:*

3: sp_fungi:*

4: sp_human:*

5: sp_invertebrate:*

6: sp_mammal:*

7: sp_mhc:*

8: sp_organelle:*

9: sp_phase:*

10: sp_plant:*

11: sp_rodent:*

12: sp_virus:*

13: sp_vertebrate:*

14: sp_unclassified:*

15: sp_rvirus:*

16: sp_bacteriaph:*

17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	182	100.0	182	4 Q9H7Y0	Q9H7Y0 homo sapien
2	127	69.8	166	4 Q8WX00	Q8WX00 homo sapien
3	26	14.3	435	11 Q8C3I9	Q8C3I9 mus musculus
4	9	4.9	225	11 Q8C708	Q8C708 mus musculus
5	8	4.4	201	13 Q8QG59	Q8QG59 ambystoma m
6	8	4.4	318	3 Q873R0	Q873R0 nectria hae
7	8	4.4	453	4 Q8N6E7	Q8N6E7 homo sapien
8	8	4.4	489	3 Q8J0Q7	Q8J0Q7 nectria hae
9	8	4.4	527	4 Q9P2B7	Q9P2B7 homo sapien
10	8	4.4	543	16 Q97S92	Q97S92 streptococc
11	8	4.4	543	16 Q8DQX9	Q8DQX9 streptococc
12	8	4.4	550	3 Q7ZA66	Q7ZA66 utiilago ma
13	7	3.8	27	12 Q91JF4	Q91JF4 hepatitis c
14	7	3.8	84	2 Q9KIN1	Q9KIN1 pseudomonas
15	7	3.8	84	4 Q9JHE9	Q9JHE9 homo sapien
16	7	3.8	87	16 Q8F4C9	Q8F4C9 leptospira

Q9KWW5 pseudomonas
Q8NLM1 corynebacte
Q8BYF7 mus musculu
O07305 pseudomonas
O05607 pseudomonas
Q8C110 mus musculu
Q853C8 mycobacteri
Q9YCB5 aeropyrum p
Q9C9P6 arabidopsis
Q7U9J2 synechococc
Q8C383 mus musculu
P74307 synechocyst
Q910D0 human cytom
Q918E3 human cytom
Q918F4 human cytom
Q918F1 human cytom
Q69186 human cytom
Q918E7 human cytom
Q910V7 human cytom
Q9K315 streptomyce
Q8BTQ8 mus musculu
Q9KIM9 pseudomonas
Q96M19 homo sapien
Q32562 escherichia
O00486 homo sapien
Q8K3C8 mus musculu
Q919M1 culex nigri
O81265 cichorium l
Q8S141 oryza sativ
Q9Y2B0 homo sapien
Q9JMN5 bacterioph
Q9QXT0 mus musculu
O00485 homo sapien
Q98H88 rhizobium l
Q9XJ27 arabidopsis
Q94J84 oryza sativ
Q99KM4 mus musculu
Q9JKX6 mus musculu
Q9UN49 homo sapien
Q81DN1 plasmodium
Q9RUP0 deinococcus
Q98GC3 rhizobium l
Q7V3V7 prochloroco
Q7VZ01 bordetella
Q80315 brachydanio
Q8M0D2 amoebidium
Q8Y1E2 brucella me
Q7W5U1 bordetella
Q7U563 synechococc
Q8ZQ88 salmonella
Q8Z728 salmonella
Q8FJA7 escherichia
Q7UD32 shigella fl
Q9XVE7 caenorhabdi
Q88ID6 pseudomonas
Q9LX75 arabidopsis
Q93J14 streptomyce
Q7XJ17 hordeum vul
Q8GKX4 arabidopsis
Q8VYR2 arabidopsis
Q94T54 zu cristatu
Q94T67 trachipteru
Q7WCR7 bordetella
Q7W587 bordetella
Q7VZS4 bordetella
Q89P22 bradyrhizob
Q8A04 bacteroides
Q7XIG8 oryza sativ
Q8CFLC mus musculu
Q7WYX1 bordetella
Q9A5P3 caulobacter
Q8TUI9 methanosarc

90 Q9H9W1 3-8 398 9 Q8H9W1
 91 Q9VXS3 3-8 405 5 Q9VXS3
 92 Q7XY4 3-8 407 10 Q7XY4
 93 Q9VXS4 3-8 410 5 Q9VXS4
 94 Q8TX63 3-8 414 7 Q8TX63
 95 Q7WQF0 3-8 420 16 Q8H419
 96 Q7WCE4 3-8 424 16 Q7WQF0
 97 Q7VRY3 3-8 424 16 Q7WCE4
 98 Q9D682 3-8 425 11 Q9D682
 99 Q8UIM0 3-8 442 17 Q8UIM0
 100

ALIGNMENTS

RESULT 1
 Q9H7Y0 PRELIMINARY; PRT; 162 AA.
 ID Q9H7Y0
 AC Q9H7Y0
 DT 01-MAR-2001 (TrEMBLrel. 16, Created)
 DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Hypothetical protein FLJ14103.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 NCBI_TaxID=9606;
 RN [1]
 RP TISSUE=Mammary gland;
 RA Isogai T., Oca T., Hayashi K., Sugiyama T., Otsuki T., Suzuki Y.,
 RA Nishikawa T., Nagai K., Sugano S., Shiratori A., Sudo H.,
 RA Megatsuma M., Hoioiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
 RA Takahashi M., Chiba Y., Ishida S., Murakawa K., Ono Y., Takiguchi S.,
 RA Watanabe S., Kimura K., Murakami K., Ishii S., Kawai Y., Saito K.,
 RA Yamamoto J., Wakamatsu A., Nakamura Y., Nagahara K., Masuno Y.,
 RA Ninomiya K., Iwayanagi T.;
 RT "NEDO human cDNA sequencing project";
 RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AK024165; BAB14843.1; -;
 KW Hypothetical protein.
 SQ SEQUENCE 182 AA; 20643 MW; CA22BB5607329427 CRC64;

Query Match 100.0%; Score 182; DB 4; Length 182;
 Best Local Similarity 100.0%; Pred. No. 3.4e-183;
 Matches 182; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
 Db 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
 QY 61 NACTGTSICKKFFKEIRSDNWLASHLGLPPDSLSYPANYSDSKIWPRVPEIFRLVSKY 120
 Db 61 NACTGTSICKKFFKEIRSDNWLASHLGLPPDSLSYPANYSDSKIWPRVPEIFRLVSKY 120
 QY 121 ONEISDRKICASAPKTCISIERVLKRTKTERFQKWLQAKELTPDLVQDCHQOQRELKFLCW 180
 Db 121 ONEISDRKICASAPKTCISIERVLKRTKTERFQKWLQAKELTPDLVQDCHQOQRELKFLCW 180
 QY 181 LR 182
 Db 181 LR 182

RESULT 2
 Q8WX00 PRELIMINARY; PRT; 166 AA.
 ID Q8WX00
 AC Q8WX00
 DT 01-MAR-2002 (TrEMBLrel. 20, Created)
 DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
 DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
 DE BA435KI.1 (Novel protein) (Fragment);

GN BA435KI.1.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Lawlor S.; (DEC-2001) to the EMBL/GenBank/DBJ databases.
 RL Submitted (AL591491; CAD13520.1; -;
 DR EMBL; AL591491; CAD13520.1; -;
 FT NON TER 166
 SQ SEQUENCE 166 AA; 18711 MW; E23F4A20F02E74C1 CRC64;

Query Match 69.8%; Score 127; DB 4; Length 166;
 Best Local Similarity 100.0%; Pred. No. 2.8e-125;
 Matches 127; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
 Db 1 MEPOLGPEAAALRPGWLALLWVSALSCSFSLPASSLSLVPQVTSYNGFTFLGLDKC 60
 QY 61 NACTGTSICKKFFKEIRSDNWLASHLGLPPDSLSYPANYSDSKIWPRVPEIFRLVSKY 120
 Db 61 NACTGTSICKKFFKEIRSDNWLASHLGLPPDSLSYPANYSDSKIWPRVPEIFRLVSKY 120
 QY 121 ONEISDR 127
 Db 121 ONEISDR 127

RESULT 3
 Q8C3I9 PRELIMINARY; PRT; 435 AA.
 ID Q8C3I9
 AC Q8C3I9
 DT 01-MAR-2003 (TrEMBLrel. 23, Created)
 DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Hypothetical B-loop containing nucleotide triphosphate hydrolases
 DE structure containing protein.
 DE 4930578C19RIK.
 GN 4930578C19RIK.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Heart;
 RX MEDLINE=22354683; PubMed=12466851;
 RA The FANTOM Consortium,
 RA the RIKEN Genome Exploration Research Group Phase I & II Team;
 RT "Analysis of the mouse transcriptome based on functional annotation of
 60,770 full-length cDNAs.";
 RL Nature 420:563-573 (2002).
 DR EMBL; AK085770; BAC39535.1; -;
 DR MGI; MGI:1923155; 4930578C19RIK.
 KW Hypothetical protein.
 SQ SEQUENCE 435 AA; 49042 MW; 0A1B466BB04CEB1D CRC64;

Query Match 14.3%; Score 26; DB 11; Length 435;
 Best Local Similarity 100.0%; Pred. No. 1.7e-18;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TFLGLDKCNACIGTSICKKFFKEIR 78
 Db 55 TFLGLDKCNACIGTSICKKFFKEIR 80

RESULT 4
 Q8C708 PRELIMINARY; PRT; 225 AA.
 ID Q8C708
 AC Q8C708
 DT 01-MAR-2003 (TrEMBLrel. 23, Created)
 DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)

```
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DB Unclassifiable.
GN AI467606.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Kidney;
RX MEDLINE=22354683; PubMed=12466851;
RA The PANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; AK052739; BAC35126.1; -.
DR MGD; MGI:2141979; AI467606.
SQ SEQUENCE 225 AA; 24532 MW; B8E8987A88983A2B CRC64;

Query Match 4.9%; Score 9; DB 11; Length 225;
Best Local Similarity 100.0%; Pred. No. 0.76;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 SSLSLVPQ 43
DB 133 SSLSLVPQ 141

RESULT 5
Q8Q59 ID Q8Q59 PRELIMINARY; PRT; 201 AA.
AC Q8Q59;
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Fibroblast growth factor 10.
OS Ambystoma mexicanum (Axolotl).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomidae;
OC Ambystoma.
OX NCBI_TaxID=8296;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21826199; PubMed=11836784;
RA Christensen R.N.; Weinstein M.; Tassava R.A.;
RT "Expression of fibroblast growth factors 4, 8, and 10 in limbs,
RT flanks, and blastemas of Ambystoma.";
RL Dev. Dyn. 223:193-203(2002).
DR EMBL; AY034453; AAK59700.1; -.
DR GO; GO:0008083; F: growth factor activity; IEA.
DR InterPro; IPR008996; Cytok IL1-like.
DR InterPro; IPR002348; IL1_HBGF.
DR Pfam; PF00167; FGF; 1.
DR PRINTS; PR00262; IL1HBGF.
DR ProDom; PD000831; IL1_HBGF; 1.
DR SMART; SM00442; FGF; 1.
SQ SEQUENCE 201 AA; 22994 MW; 89EA1E61806AF57 CRC64;

Query Match 4.4%; Score 8; DB 13; Length 201;
Best Local Similarity 100.0%; Pred. No. 7.8;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 LALLLWS 24
DB 19 LALLLWS 26

RESULT 6
Q873R0 ID Q873R0 PRELIMINARY; PRT; 318 AA.
AC Q873R0;
DT 01-JUN-2003 (TrEMBLrel. 24, Created)

DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Putative membrane protein.
OS Nectria haematococca.
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
OC Hypocreomycetidae; Hypocreales; Nectriaceae; Nectria.
OX NCBI_TaxID=140110;
RN [1]
RP SEQUENCE FROM N.A.
RA Liu X.; VanEtten H.D.;
RT "The right genomic region flanking the BBP gene cluster in the fungal
RT pathogen Nectria haematococca.";
RL Submitted (NOV-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY179748; AAO72071.1; -.
DR GO; GO:0005215; P: transporter activity; IEA.
DR GO; GO:0006810; P: transport; IEA.
DR InterPro; IPR002830; carboxylase.
DR InterPro; IPR000566; Lipocln_cytFABP.
DR Pfam; PF01977; UbiD; 1.
DR TIGRFAMs; TIGR00148; TIGR00148; 1.
DR PROSITE; PS00213; LIPOCALIN; 1.
SQ SEQUENCE 318 AA; 34737 MW; B6392A2A3D3CD43 CRC64;

Query Match 4.4%; Score 8; DB 3; Length 318;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 86 HGLPPDS 93
DB 81 HGLPPDS 88

RESULT 7
Q8N6E7 ID Q8N6E7 PRELIMINARY; PRT; 453 AA.
AC Q8N6E7;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Similar to KIAA1430 protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Strausberg R.;
RL Submitted (MAY-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC030535; AAK30535.1; -.
SQ SEQUENCE 453 AA; 50537 MW; E99886638D8B91C2 CRC64;

Query Match 4.4%; Score 8; DB 4; Length 453;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 29 SFSLPASS 36
DB 91 SFSLPASS 98

RESULT 8
Q8J0Q7 ID Q8J0Q7 PRELIMINARY; PRT; 489 AA.
AC Q8J0Q7;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein (fragment).
OS Nectria haematococca.
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
OC Hypocreomycetidae; Hypocreales; Nectriaceae; Nectria.
OX NCBI_TaxID=140110;
```

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RN RP SEQUENCE FROM N.A.
RL Liu X., VanEtten H.;
RL Submitted (OCT-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY165032; MAN86012.1; -.
DR GO; GO:0005215; F:transporter activity; IEA.
DR GO; GO:0006810; P:transport; IEA.
DR InterPro; IPR002830; carboxylase.
DR InterPro; IPR000566; Lipocin_cytfabp.
DR Pfam; PF01977; UbiD; 1.
DR TIGRFAMs; TIGR00148; 1.
DR PROSITE; PS00213; LIPOCALIN; 1.
DR Hypothetical protein.
KW NON TER 489
FT NON TER 489
SQ SEQUENCE 489 AA; 54253 MW; A133A86EFD0872C9 CRC64;

Query Match 4.4%; Score 8; DB 3; Length 489;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 86 HGLPSPDS 93
Db 89 HGLPSPDS 96

RESULT 9
ID Q9P2B7 PRELIMINARY; PRT; 527 AA.
AC Q9P2B7;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE Hypothetical protein KIAA1430 (Fragment).
GN KIAA1430.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=20181126; PubMed=10718198;
RA Nagase T., Kikuno R., Ishikawa K., Hirokawa M., Ohara O.;
RT "Prediction of the coding sequences of unidentified human genes.XVI.
RT The complete sequences of 150 new cDNA clones from brain which code
RT for large proteins in vitro."
RL DNA Res. 7:65-73(2000).
RW Hypothetical protein.
FT NON TER 1
SQ SEQUENCE 527 AA; 58896 MW; 082CF439BB9F4F0A CRC64;

Query Match 4.4%; Score 8; DB 4; Length 527;
Best Local Similarity 100.0%; Pred. No. 18;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 29 SFSLPASS 36
Db 86 SFSLPASS 93

RESULT 10
ID Q9TS92 PRELIMINARY; PRT; 543 AA.
AC Q9TS92;
DT 01-OCT-2001 (TrEMBLrel. 18, Created)
DT 01-OCT-2001 (TrEMBLrel. 18, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Na/Pi cotransporter II-related protein.
GN SP0496.
OS Streptococcus pneumoniae.
OC Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
OC Streptococcus.

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OX NCBI_TaxID=13113;
RN RP SEQUENCE FROM N.A.
RC STRAIN=ATCC BAA-334 / TIGR4;
RX MEDLINE=21357209; PubMed=11463916;
RA Tettelin H., Nelson K.E., Paulsen I.T., Eisen J.A., Read T.D.,
RA Peterson S., Heidelberg J., DeBoy R.T., Haft D.H., Dodson R.J.,
RA Durkin A.S., Gwinn M., Kolonay J.F., Nelson W.C., Peterson J.D.,
RA Umayam L.A., White O., Salzberg S.L., Lewis M.R., Radune D., C.L.,
RA Holtzapple E., Khouri H., Wolf A.M., Utterback T.R., Hansen E.K.,
RA McDonald L.A., Feldblyum T.V., Angiuoli S., Dickinson T., Hickey E.K.,
RA Holt I.E., Loftus B.J., Yang F., Smith H.O., Venter J.C.,
RA Dougherty B.A., Morrison D.A., Hollingshead S.K., Fraser C.M.;
RT "Complete genome sequence of a virulent isolate of Streptococcus
RT pneumoniae."
RL Science 293:498-506(2001).
DR EMBL; AR007361; AAK74654.1; -.
DR PIR; E95057; E95057.
DR TIGR; SP0496; -.
DR GO; GO:0016020; C-membrane; IEA.
DR GO; GO:0015321; F:sodium-dependent phosphate transporter acti. .; IEA.
DR GO; GO:0006817; P:phosphate transport; IEA.
DR InterPro; IPR003841; Na/Pi_cotranspt.
DR InterPro; IPR004633; NaPi_cotransptII.
DR Pfam; PF02690; Na_Pi_cotrans; 2.
DR TIGRFAMs; TIGR00704; NaPi_cotrn_rel; 1.
KW Complete proteome.
SQ SEQUENCE 543 AA; 59575 MW; C79ED04CCAF0EB5 CRC64;

Query Match 4.4%; Score 8; DB 16; Length 543;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 141 IERVLRKT 148
Db 492 IERVLRKT 499

RESULT 11
ID Q8DQX9 PRELIMINARY; PRT; 543 AA.
AC Q8DQX9;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Conserved hypothetical protein.
GN SP0439.
OS Streptococcus pneumoniae (strain ATCC BAA-255 / R6).
OC Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
OC Streptococcus.
OX NCBI_TaxID=171101;
RN RP SEQUENCE FROM N.A.
RX MEDLINE=21429245; PubMed=11544234;
RA Hoskins J., Alborn W.E. Jr., Arnold J., Blaszcak L.C., Burgett S.,
RA DeHoff B.S., Estrem S.T., Fritz L., Fu D.-J., Fuller W., Geringer C.,
RA Gilmour R., Glass J.S., Khoja H., Kraft A.R., Lagace R.E.,
RA LeBlanc D.J., Lee L.N., Lefkowitz E.J., Lu J., Matsushima P.,
RA McAhren S.M., McHenry M., McLeaster K., Mundy C.W., Niclas T.I.,
RA Norris F.H., O'Gara M., Peery R.B., Robertson G.T., Rockey P.,
RA Sun P.-M., Winkler M.E., Yang Y., Young-Bellido M., Zhao G.,
RA Zook C.A., Baltz R.H., Jaskunas S.R., Rostock P.R. Jr., Skatrud P.L.,
RA Glass J.I.;
RT "Genome of the bacterium Streptococcus pneumoniae strain R6."
RL J. Bacteriol. 183:5709-5717(2001).
DR EMBL; AE008424; AAK99243.1; -.
DR PIR; G97926; G97926.
DR GO; GO:0016020; C-membrane; IEA.
DR GO; GO:0015321; F:sodium-dependent phosphate transporter acti. .; IEA.
DR GO; GO:0006817; P:phosphate transport; IEA.
DR InterPro; IPR03841; Na/Pi_cotranspt.
DR InterPro; IPR04633; NaPi_cotransptII.
DR Pfam; PF02690; Na_Pi_cotrans; 2.

```

```
DR TIGRFAMs; TIGR00704; Napi_cotrn_rel; 1.
KW Hypothetical protein; Complete proteome.
SQ SEQUENCE 543 AA; 59637 MW; 6996ED3D83FA3B7A CRC64;

Query Match 4.4%; Score 8; DB 16; Length 543;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 141 IERVLRKT 148
DB 492 IERVLRKT 499

RESULT 12
Q7ZA66 PRELIMINARY; PRT; 550 AA.
AC Q7ZA66;
DT 01-OCT-2003 (TrEMBLrel. 25, Created)
DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Related to protein disulfide isomerase.
GN PIG2.
OS Ustilago maydis (Smut fungus)
OC Eukaryota; Fungi; Basidiomycota; Ustilaginomycetes; Ustilago.
OC Ustilaginomycetidae; Ustilaginales; Ustilaginaceae; Ustilago.
OX NCBI_TaxID=5270;
RN [1]
RP SEQUENCE FROM N.A.
RA Aichinger C., Hansson K., Eichhorn H., Lessing F., Mannhaupt G.,
RA Mewes W., Kahmann R.;
RT "Identification of plant regulated genes in Ustilago maydis by
RT enhancer trapping mutagenesis.";
RL Mol. Genet. Genomics 0:0-0(2003).
DR EMBL; BX511040; CAD91461.1; -.
DR Isomerase.
KW SEQUENCE 550 AA; 59141 MW; AF2475F38AF3130 CRC64;

Query Match 4.4%; Score 8; DB 3; Length 550;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 33 PASSLSL 40
DB 219 PASSLSL 226

RESULT 13
Q9IJF4 PRELIMINARY; PRT; 27 AA.
AC Q9IJF4;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Envelope protein (Genome polyprotein) (Fragment).
OS Hepatitis C virus.
OC Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
OC Hepacivirus.
OX NCBI_TaxID=11103;
RN [1]
RP SEQUENCE FROM N.A.
RA Alberto S.-F.;
RT "Influence of the dynamics of Hepatitis C virus quasispecies in the
RT histological outcome of liver transplantation.";
RL Submitted (JAN-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF221141; AAF77703.1; -.
DR GO; GO:0016021; C:integral to membrane; IEA.
DR GO; GO:0019028; C:viral capsid; IEA.
DR GO; GO:0019031; C:viral envelope; IEA.
DR GO; GO:0005198; F:structural molecule activity; IEA.
DR InterPro; IPR002531; HCV NS1.
DR Pfam; PF01560; HCV NS1; I.
KW Coat protein; Envelope protein; Glycoprotein; Nonstructural protein;
KW Polyprotein; Transmembrane.
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FT NON TER 1 1
FT NON TER 27 27
SQ SEQUENCE 27 AA; 2716 MW; C8F6555E3CF5925A CRC64;

Query Match 3.8%; Score 7; DB 12; Length 27;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
DB 12 ASSLSL 18

RESULT 14
Q9KINI PRELIMINARY; PRT; 84 AA.
AC Q9KINI;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE ECF sigma factor PrtI (Fragment).
GN PrtI.
OS Pseudomonas fluorescens.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC Pseudomonadaceae; Pseudomonas.
OX NCBI_TaxID=294;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=LS107d2;
RX MEDLINE=20553178; PubMed=11101673;
RA Burger M., Woods R.G., McCarthy C., Beacham I.R.;
RT "Temperature regulation of protease in Pseudomonas fluorescens LS107d2
RT by an ECF sigma factor and a transmembrane activator.";
RL Microbiology 146:3149-3155(2000).
DR EMBL; AF228766; AAF81072.1; -.
DR GO; GO:0005622; C:intracellular; IEA.
DR GO; GO:0003700; F:transcription factor activity; IEA.
DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR InterPro; IPR000792; HTH LuxR.
DR InterPro; IPR009043; RNA pol sigma.
DR InterPro; IPR007630; Sigma70_r4.
DR Pfam; PF04545; sigma70_r4; 1.
FT NON TER 1 1
SQ SEQUENCE 84 AA; 9210 MW; 9BC226F1F435387E CRC64;

Query Match 3.8%; Score 7; DB 2; Length 84;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 18 ALLLWVS 24
DB 30 ALLLWVS 36

RESULT 15
Q9UHE9 PRELIMINARY; PRT; 84 AA.
AC Q9UHE9;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DE ZSIG9 protein (transmembrane protein 4).
GN ZSIG9.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Sheppard P., Jelinek L., Whitmore T., Blumberg H., Lehner J.,
RA O'Hara P.;
RT "Homo sapiens putative secreted protein.";
RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.
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RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Eye;
RA Strausberg R.;
RL Submitted (NOV-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF186113; AAF01431.1; -
DR EMBL: BC001027; AAH01027.1; -
SQ SEQUENCE 84 AA; 9116 MW; DCA2B08EC77EF1F0 CRC64;

Query Match 3.8%; Score 7; DB 4; Length 84;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALLL 21
DB 5 GWLALLL 11

RESULT 16
QBFC9 PRELIMINARY; PRT; 87 AA.
AC QBFC9;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE BOLA protein.
GN LA2112.
OS Leptospira interrogans.
OC Bacteria; Spirochaetes; Spirochaetales; Leptospiraceae; Leptospira.
OX NCBI_TaxID=173;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=56601 / Serogroup Icterohaemorrhagiae / Serovar lai;
RA Ren S.;
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL: AE011383; AAN49311.1; -
DR GO: GO:0030528; F:transcription regulator activity; IEA.
DR InterPro: IPR002634; BOLA.
DR Pfam: PF01722; BOLA; 1.
KW Complete proteome.
SQ SEQUENCE 87 AA; 9878 MW; D15B66B794A7FA23 CRC64;

Query Match 3.8%; Score 7; DB 16; Length 87;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 73 FKREIRS 79
DB 3 FKREIRS 9

RESULT 17
Q9KWN5 PRELIMINARY; PRT; 102 AA.
AC Q9KWN5;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Mercuric ion transport protein (fragment).
GN MERT OR MERT2X1.
OS Pseudomonas putida.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC Pseudomonadaceae; Pseudomonas.
OX NCBI_TaxID=303;
RN [1]
RP SEQUENCE FROM N.A.
RA Kholodii G.Y., Mindlin S.Z., Gorlenko Z.M., Bass I.A., Kalyaeva E.S.,
RA Nikiforov V.;
RC "Host-dependent transposition of Tn5041."
RL Russ. J. Genet. 36:365-373(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=MU10-2;
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RX MEDLINE=22315381; PubMed=12427948;
RA Kholodii G., Gorlenko Z., Mindlin S., Hobman J., Nikiforov V.;
RT "Tn5041-like transposons: molecular diversity, evolutionary
RT relationships and distribution of distinct variants in environmental
RT bacteria.";
RL Microbiology 148:3569-3582(2002).
DR EMBL: Y18976; CAB81571.1; -
DR EMBL: AJ318529; CAC86913.1; -
DR GO: GO:0016020; C:membrane; IEA.
DR GO: GO:0015097; F:mercury ion transporter activity; IEA.
DR GO: GO:0015694; F:mercury ion transport; IEA.
DR InterPro: IPR003457; Transprt_MerT.
DR Pfam: PF02411; MerT; 1.
FT NON_TER 102 102
SQ SEQUENCE 102 AA; 10829 MW; C564F84950745332 CRC64;

Query Match 3.8%; Score 7; DB 2; Length 102;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 PQVTSY 48
DB 85 PQVTSY 91

RESULT 18
QBMLM1 PRELIMINARY; PRT; 104 AA.
AC QBMLM1;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Predicted transcriptional regulators.
GN CG2320.
OS Corynebacterium glutamicum (Brevibacterium flavum).
OC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
OC Corynebacterineae; Corynebacteriaceae; Corynebacterium.
OX NCBI_TaxID=1718;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=ATCC 13032 / DSM 20300 / NCIB 10025;
RA Nakagawa S.;
RL "Complete genomic sequence of Corynebacterium glutamicum ATCC 13032."
RL Submitted (MAY-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL: AP005283; BAC00314.1; -
DR GO: GO:0003677; F:DNA binding; IEA.
DR InterPro: IPR001387; HTH_3.
DR Pfam: PF01381; HTH_3; 1.
KW Complete proteome.
SQ SEQUENCE 104 AA; 11276 MW; 42B9F4BCEFC9D9791 CRC64;

Query Match 3.8%; Score 7; DB 16; Length 104;
Best Local Similarity 100.0%; Pred. No. 49;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 83 LASHLGL 89
DB 89 LASHLGL 95

RESULT 19
QBMYF7 PRELIMINARY; PRT; 107 AA.
AC QBMYF7;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Hypothetical death domain containing protein.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
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RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Thymus;
RX MEDLINE=22354683; PubMed=12466851;
RA THE FANTOM Consortium,
RT the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; AK039924; BAC30479.1; -.
DR PIR; PT0558; PT0677.
KW Hypothetical protein.
SQ SEQUENCE 107 AA; 11995 MW; 2A54AFEE3827F768 CRC64;

Query Match          3.8%; Score 7; DB 11; Length 107;
Best Local Similarity 100.0%; Pred. No. 50;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      83 LASHLGL 83
DB      91 LASHLGL 97

RESULT 20
Q07305          PRELIMINARY; PRT; 116 AA.
AC Q07305;
DT 01-JUL-1997 (TREMBLrel. 04, Created)
DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE MERT protein.
GN MERT.
OS Pseudomonas sp., and
OS Pseudomonas paucimobilis (Sphingomonas paucimobilis).
OC Bacteria; Proteobacteria.
OX NCBI_TaxID=306, 13689;
RN [1]
RP SEQUENCE FROM N.A.
RC SPECIES=Pseudomonas sp.; STRAIN=TC97;
RX MEDLINE=97303088; PubMed=9159519;
RA Yurieva O., Kholodii G., Manakhin L., Gorlenko Z., Kalyaeva E.,
RA Mindlin S., Nikiforov V.;
RT "Intercontinental spread of promiscuous mercury-resistance transposons
RT in environmental bacteria.";
RL Mol. Microbiol. 24:321-329(1997).
RN [2]
RP SEQUENCE FROM N.A.
RC SPECIES=P. paucimobilis; STRAIN=661H, and 660H;
RX MEDLINE=97208220; PubMed=9055422;
RA Liebert C.A., Wireman J., Smith T., Summers A.O.;
RT "Phylogeny of mercury resistance (mer) operons of gram-negative
RT bacteria isolated from the fecal flora of primates.";
RL Appl. Environ. Microbiol. 63:1066-1076(1997).
RN [3]
RP SEQUENCE FROM N.A.
RC SPECIES=P. paucimobilis; STRAIN=661H, and 660H;
RX MEDLINE=98027386; PubMed=9361435;
RA Wireman J., Liebert C.A., Smith T., Summers A.O.;
RT "Association of mercury resistance with antibiotic resistance in the
RT gram-negative fecal bacteria of primates.";
RL Appl. Environ. Microbiol. 63:4494-4503(1997).
RN [4]
RP SEQUENCE FROM N.A.
RC SPECIES=P. paucimobilis; STRAIN=661H, and 660H;
RA Liebert C.A., Watson A.L., Summers A.O.;
RT "The quality of merC: A hotspot of genetic diversity in mercury
RT resistance loci.";
RL Submitted (JAN-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; Y09210; CAA70410.1; -.
DR EMBL; AF120973; AAD23811.1; -.
DR EMBL; AF120972; AAD23806.1; -.
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0015097; P:mercury ion transporter activity; IEA.
DR GO; GO:0015694; P:mercury ion transport; IEA.

DR SEQUENCE FROM N.A.
RC STRAIN=IPR003457; Transprt_Mert.
DR Pfam; PF02411; MERT; 1.
SQ SEQUENCE 116 AA; 12437 MW; 5C926A63C211FE6B CRC64;

Query Match          3.8%; Score 7; DB 2; Length 116;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      42 PQVRTSY 48
DB      85 PQVRTSY 91

RESULT 21
O05637          PRELIMINARY; PRT; 116 AA.
AC O05637;
DT 01-JUL-1997 (TREMBLrel. 04, Created)
DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Mercuric ion transport protein.
GN MERT.
OS Pseudomonas sp.
OC Bacteria; Proteobacteria.
OX NCBI_TaxID=306;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=KHP41; TRANSPOSOM=Tn5041;
RX MEDLINE=97419493; PubMed=9274008;
RA Kholodii G.Y., Yurieva O.V., Gorlenko Z.M., Mindlin S.Z., Bass I.A.,
RA Lomovskaya O.L., Kopteva A.V., Nikiforov V.G.;
RT "Tn5041: a chimeric mercury resistance transposon closely related to
RT the toluene degradative transposon Tn4651.";
RL Microbiology 143:2549-2556(1997).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=KHP41; TRANSPOSOM=Tn5041;
RA Kholodii G.Y., Mindlin S.Z., Gorlenko Z.M., Bass I.A., Kalyaeva E.S.,
RA Nikiforov V.;
RT "Host-dependent transposition of Tn5041.";
RL Russ. J. Genet. 36:365-373(2000).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=KHP41; TRANSPOSOM=Tn5041;
RA Kholodii G.;
RL Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0015097; P:mercury ion transporter activity; IEA.
DR GO; GO:0015694; P:mercury ion transport; IEA.
DR InterPro; IPR003457; Transprt_Mert.
DR Pfam; PF02411; MERT; 1.
SQ SEQUENCE 116 AA; 12372 MW; 833080A916173371 CRC64;

Query Match          3.8%; Score 7; DB 2; Length 116;
Best Local Similarity 100.0%; Pred. No. 54;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      42 PQVRTSY 48
DB      85 PQVRTSY 91

RESULT 22
Q8C1L0          PRELIMINARY; PRT; 116 AA.
ID Q8C1L0;
DT 01-MAR-2003 (TREMBLrel. 23, Created)
DT 01-MAR-2003 (TREMBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Hypothetical death domain containing protein (Prag-ent).
GN 2510009H09RIK.
OS Mus musculus (Mouse).

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OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 ON NCBI_TaxID=10090;
 RN [1]
 RC STRAIN=C57BL/6J; TISSUE=Liver;
 RX MEDLINE=22354683; PubMed=12466851;
 RA The FANTOM Consortium,
 RA the RIKEN Genome Exploration Research Group Phase I & II Team;
 RT "Analysis of the mouse transcriptome based on functional annotation of
 RT 60,770 full-length cDNAs."
 RL Nature 420:563-573(2002).
 DR EMBL: AK010945; BAC25320.1; -;
 DR MGD; MGI:1923839; 2510009H09Rik.
 DR GO; GO:0007165; P:signal transduction; IEA.
 DR InterPro; IPR004048; Death.
 DR PFAM; PF00531; death; 1.
 DR SMART; SM00005; DEATH; 1.
 DR PROSITE; PS00017; DEATH_DOMAIN; 1.
 KW Hypothetical protein.
 FT NON_TER 1
 SQ SEQUENCE 116 AA; 13219 MW; ECE5B49726C687CA CRC64;
 Query Match 3.8%; Score 7; DB 11; Length 116;
 Best Local Similarity 100.0%; Pred. No. 54;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 83 LASHLGL 89
 Db 31 LASHLGL 37
 RESULT 23
 ID Q853C8 PRELIMINARY; PRT; 124 AA.
 AC Q853C8;
 DT 21-JUN-2003 (TrEMBLrel. 24, Created)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Gp154.
 GN 154.
 OS Mycobacteriophage Bx1.
 OC Viruses; dsDNA viruses, no RNA stage; Caudovirales; Myoviridae.
 OC NCBI_TaxID=205877;
 RN [1]
 RC SEQUENCE FROM N.A.
 RX MEDLINE=22592660; PubMed=12705866;
 RA Pedulla M.L., Ford M.E., Houtz J.M., Karthikeyan T., Wadsworth C.,
 RA Lewis J.A., Jacobs-Sera D., Falbo J., Gross J., Pannunzio N.R.,
 RA Brucker W., Kumar V., Kandasamy J., Keenan L., Bardarov S.,
 RA Kriakov J., Lawrence J.G., Jacobs W.R. Jr., Hendrix R.W.,
 RA Hatfull G.F.;
 RT "Origins of highly mosaic mycobacteriophage genomes."
 RL Cell 113:171-182(2003).
 DR EMBL; AY129337; AAN16809.1; -;
 SQ SEQUENCE 124 AA; 13428 MW; E405AF0C3474989B CRC64;
 Query Match 3.8%; Score 7; DB 9; Length 124;
 Best Local Similarity 100.0%; Pred. No. 57;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 6 GPEAAAL 12
 Db 98 GPEAAAL 104
 RESULT 24
 ID Q9YCB5 PRELIMINARY; PRT; 130 AA.
 AC Q9YCB5;
 DT 01-NOV-1999 (TrEMBLrel. 12, Created)
 DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)

DE Hypothetical protein APE1341.
 GN APE1341.
 OS Aeropyrum pernix.
 OC Archaea; Crenarchaeota; Thermoprotei; Desulfurococcales;
 OC Desulfurococaceae; Aeropyrum.
 ON NCBI_TaxID=56636;
 RN [1]
 RC SEQUENCE FROM N.A.
 RX STRAIN=KJ;
 RX MEDLINE=99310339; PubMed=10382966;
 RA Kawarabayashi Y., Hino Y., Horikawa H., Yamazaki S., Haikawa Y.,
 RA Jin-no K., Takahashi M., Sekine M., Baba S.-I., Arkai A., Kosugi H.,
 RA Hosoyama A., Fukui S., Nagai Y., Nishijima K., Nakazawa H.,
 RA Takamiya M., Masuda S., Funahashi T., Tanaka T., Kudoh Y.,
 RA Yamazaki Y., Kushida N., Oguchi A., Aoki K.-I., Kubota K.,
 RA Nakamura J., Nomura N., Sako Y., Kikuchi H.;
 RT "Complete genome sequence of an aerobic hyper-thermophilic
 RT crenarchaeon, Aeropyrum pernix K1."
 RL DNA Res. 6:83-101(1999).
 DR EMBL; AP000061; BAA80333.1; -;
 DR FIC; G72609; G72609.
 KW Hypothetical protein; Complete proteome.
 SQ SEQUENCE 130 AA; 13783 MW; 900DB1732C30C2A5 CRC64;
 Query Match 3.8%; Score 7; DB 17; Length 130;
 Best Local Similarity 100.0%; Pred. No. 59;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 34 ASSLSL 40
 Db 50 ASSLSL 56
 RESULT 25
 ID Q9C9P6 PRELIMINARY; PRT; 132 AA.
 AC Q9C9P6;
 DT 01-JUN-2001 (TrEMBLrel. 17, Created)
 DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Putative ribosomal protein S9.
 GN F9E10.17.
 OS Arabidopsis thaliana (Mouse-ear cress).
 OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
 OC euroids II; Brassicales; Brassicaceae; Arabidopsis.
 ON NCBI_TaxID=3702;
 RN [1]
 RC SEQUENCE FROM N.A.
 RX STRAIN=cv. Columbia;
 RX MEDLINE=21016719; PubMed=11130713;
 RA Theologis A., Ecker J.R., Palm C.J., Federspiel N.A., Kaul S.,
 RA White O., Alonso J., Altafi H., Araujo R., Bowman C.L., Brooks S.Y.,
 RA Buehler E., Chao A., Chen H., Cheuk R.P., Chin C.W.,
 RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
 RA Dunn P., Etgu P., Feldblum T.V., Feng J.-D., Fong B., Fujii C.Y.,
 RA Gill J.E., Goldsmith A.D., Haas B., Hansen N.F., Hughes B., Huizar L.,
 RA Hunter J.L., Jenkins J., Johnson-Hopson C., Khan S., Khaykin E.,
 RA Kim C.J., Koo H.B., Kremenetskaia I., Kurtz D.B., Kwan A., Lam B.,
 RA Langin-Hooper S., Lee A., Lee J.M., Lenz C.A., Li J.H., Li Y.-P.,
 RA Lin X., Liu S.X., Liu Z.A., Luros J.S., Maiti R., Marzilli A.,
 RA Militscher J., Miranda M., Nguyen M., Nierman W.C., Osborne B.I.,
 RA Pai G., Peterson J., Pham P.K., Rizzo M., Rooney T., Rowley D.,
 RA Sakano H., Salzberg S.L., Schwartz J.R., Shinn P., Southwick A.M.,
 RA Sun H., Tallon L.J., Tambunga G., Toriumi M.J., Town C.D.,
 RA Utterback T., Van Aken S., Vaysberg M., Vysotskaia V.S., Walker M.,
 RA Wu D., Yu G., Fraser C.M., Venter J.C., Davis R.W.;
 RT "Sequence and analysis of chromosome 1 of the plant Arabidopsis
 RT thaliana."
 RL Nature 408:816-820(2000).
 DR EMBL; AC013258; AAG51912.1; -;
 DR FIC; F96779; F96779.
 DR GO; GO:0005622; C:intracellular; IEA.

DR GO: GO:0005840; C:ribosome; IEA.
 DR GO: GO:0003735; F:structural constituent of ribosome; IEA.
 DR GO: GO:0006412; P:protein biosynthesis; IEA.
 DR InterPro: IPR000754; Ribosomal_S9.
 DR Pfam: PF00380; Ribosomal_S9; 1.
 DR Pfam: PF001627; Ribosomal_S9; 1.
 DR Ribosomal protein.
 SW RIBOSOMAL PROTEIN.
 SQ SEQUENCE 132 AA; 14283 MW; E970C02586F53BFC CRC64;

Query Match 3.8%; Score 7; DB 10; Length 132;
 Best Local Similarity 100.0%; Pred. No. 60;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
 |||||
 DB 8 ASSLSL 14

RESULT 25

Q7U9J2 PRELIMINARY; PRT; 140 AA.

ID Q7U9J2
 AC Q7U9J2
 DT 01-OCT-2003 (TrEMBLrel. 25, Created)
 DT 01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
 DE Hypothetical protein precursor.
 GN SYN0264.
 OS Synechococcus sp. (strain WH8102).
 OC Bacteria; Cyanobacteria; Chroococcales; Synechococcus.
 OX NCBI_TaxID=84588;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=22825697; PubMed=12917641;
 RA Palenik B., Brahamsa B., Iarner P.W., Land M., Hauser L., Chain P.,
 RA Lamerdin J., Regala W., Allen E.B., McCarren J., Paulsen I.,
 RA Dufresne A., Partensky F., Webb E.A., Waterbury J.;
 RT "The genome of a motile marine Synechococcus.";
 RL Nature 424:1037-1042(2003).
 DR EMBL: BX569689; CAE06779.1; --
 KW Hypothetical protein; Signal; Complete proteome.
 FT SIGNAL 1 18
 SQ SEQUENCE 140 AA; 14890 MW; 8F862FCD253784FA CRC64;

Query Match 3.8%; Score 7; DB 16; Length 140;
 Best Local Similarity 100.0%; Pred. No. 63;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALL 21
 |||||
 DB 5 GWLALL 11

RESULT 27

Q8C383 PRELIMINARY; PRT; 145 AA.

ID Q8C383
 AC Q8C383
 DT 01-MAR-2003 (TrEMBLrel. 23, Created)
 DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Hypothetical protein (fragment).
 GN COX7B.

OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Head;
 RX MEDLINE=22354683; PubMed=12466851;
 RA The FANTOM Consortium.
 RA the RIKEN Genome Exploration Research Group Phase I & II Team;
 RT "Analysis of the mouse transcriptome based on functional annotation of
 60,770 full-length cDNAs.";

RL Nature 420:563-573(2002).
 DR EMBL: AK086654; BAC39711.1; --
 DR PIR: PT0645; PT0645.
 DR MGI: MGI:191392; Cox7b.
 KW Hypothetical protein.
 FT NON_TER 1
 SQ SEQUENCE 145 AA; 15419 MW; 423045899247D3C7 CRC64;

Query Match 3.8%; Score 7; DB 11; Length 145;
 Best Local Similarity 100.0%; Pred. No. 65;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 34 ASSLSL 40
 |||||
 DB 33 ASSLSL 39

RESULT 28

P74307 PRELIMINARY; PRT; 147 AA.

ID P74307
 AC P74307
 DT 01-FEB-1997 (TrEMBLrel. 02, Created)
 DT 01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
 DE Hypothetical protein slr0941.
 GN SLR0941.
 OS Synechocystis sp. (strain PCC 6803).
 OC Bacteria; Cyanobacteria; Chroococcales; Synechocystis.
 OX NCBI_TaxID=1148;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97061201; PubMed=8905231;
 RA Kaneko T., Sato S., Kotani H., Tanaka A., Asamizu E., Nakamura Y.,
 RA Miyajima N., Hiroseawa M., Sugiyura M., Sasamoto S., Kimura T.,
 RA Hosouchi T., Matsumoto A., Muraki A., Nakazaki M., Naruo K., Okumura S.,
 RA Shimpou S., Takeuchi C., Wada T., Watanabe A., Yamada M., Yasuda M.,
 RA Tabata S.;
 RT "Sequence analysis of the genome of the unicellular cyanobacterium
 RT Synechocystis sp. strain PCC6803. II. Sequence determination of the
 RT entire genome and assignment of potential protein-coding regions.";
 RL DNA Res. 3:109-136(1996).
 DR EMBL: D90914; EAA18401.1; --
 DR PIR: S76142; S76142.
 DR InterPro: IPR007821; DUF704.
 DR Pfam: PF05146; DUF704; 1.
 KW Hypothetical protein; Complete proteome.
 SQ SEQUENCE 147 AA; 17215 MW; 89D714027B61C931 CRC64;

Query Match 3.8%; Score 7; DB 16; Length 147;
 Best Local Similarity 100.0%; Pred. No. 66;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 PGWLALL 20
 |||||
 DB 110 PGWLALL 116

RESULT 29

Q913D0 PRELIMINARY; PRT; 149 AA.

ID Q913D0
 AC Q913D0
 DT 01-DEC-2001 (TrEMBLrel. 19, Created)
 DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
 DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
 DE US3iii protein.
 GN US3.
 OS Human cytomegalovirus.
 OC Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
 OC Betaherpesvirinae; Cytomegalovirus.
 OX NCBI_TaxID=10359;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=29A, and 27A;

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
RESULT 37
Q8BTQ8
ID Q8BTQ8 PRELIMINARY; PRT; 164 AA.
AC Q8BTQ8;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Hypothetical death domain containing protein.
GN 2510009H09RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RN SEQUENCE FROM N.A.
RC STRAIN=NOD; TISSUE=Thymus;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium.
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs."
RL Nature 420:563-573(2002).
DR EMBL: AK089034; BAC40711.1; --
DR PIR: P70558; P70677.
DR MGD; MGI:1923839; 2510009H09RIK.
DR GO; GO:0007165; P:signal transduction; IEA.
DR InterPro; IPR000488; Death.
DR Pfam; PF00531; death; 1.
DR SMART; SM00005; DEATH; 1.
DR PROSITE; PS50017; DEATH_DOMAIN; 1.
KW Hypothetical protein.
SQ SEQUENCE 164 AA; 18409 MW; 815E0DD1DDBA3582 CRC64;

Query Match 3.8%; Score 7; DB 11; Length 164;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 83 LASHLGL 89
Db 79 LASHLGL 85
```

```
RESULT 38
Q9KIM9
ID Q9KIM9 PRELIMINARY; PRT; 165 AA.
AC Q9KIM9;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE ECF sigma factor PrcI (RNA polymerase sigma factor).
GN PRT1.
OS Pseudomonas fluorescens.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC Pseudomonadaceae; Pseudomonas.
OX NCBI_TaxID=294;
RN [1]
RN SEQUENCE FROM N.A.
RC STRAIN=B52;
RX MEDLINE=20553178; PubMed=11101673;
RA Burger M., Woods R.G., McCarthy C., Beacham I.R.;
RT "Temperature regulation of protease in Pseudomonas fluorescens LS107d2
by an ECF sigma factor and a transmembrane activator."
RL Microbiology 146:3149-3155(2000).
DR EMBL: AF228767; AAF81074.1; --
DR InterPro; IPR009043; RNA_pol_sigma.
DR Pfam; PF04542; sigma70_r2; 1.
SQ SEQUENCE 165 AA; 19168 MW; 8BCAF4E984051FCF CRC64;

Query Match 3.8%; Score 7; DB 2; Length 165;
Best Local Similarity 100.0%; Pred. No. 74;

QY 83 LASHLGL 89
Db 79 LASHLGL 85
```

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
RESULT 39
Q96ML9
ID Q96ML9 PRELIMINARY; PRT; 166 AA.
AC Q96ML9;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE Hypothetical protein FLJ32894.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RN SEQUENCE FROM N.A.
RC TISSUE=Testis;
RA Ishibashi T., Kanehori K., Yosida M., Watanabe S., Ishida S., Ono Y.,
RA Hotuta T., Hiraoka S., Murakawa K., Takiguchi S., Kusano J., Chiba Y.,
RA Watanabe M., Fujimori K., Tanai H., Ishida M., Yamashita H., Ishii S.,
RA Sugiyama T., Irie R., Otsuki T., Sato H., Wakamatsu A., Saito K.,
RA Yamamoto J., Isono Y., Kawai-Hio Y., Saito K., Nishikawa T.,
RA Kimura K., Matsuo K., Nakamura Y., Sekine M., Kikuchi H., Kanda K.,
RA Wagatsuma M., Takahashi-Fujii A., Oshima A., Sugiyama A., Kawakami B.,
RA Suzuki Y., Sugano S., Nagahara K., Masuho Y., Nagai K., Isogai T.;
RA "NEDO human cDNA sequencing project."
RT Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AK057456; BAB71495.1; --
KW Hypothetical protein.
SQ SEQUENCE 166 AA; 18185 MW; 200B25DE44CA7857 CRC64;
```

```
Query Match 3.8%; Score 7; DB 4; Length 166;
Best Local Similarity 100.0%; Pred. No. 74;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 130 CASASAP 136
Db 119 CASASAP 125
```

Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 40
Q32562
ID Q32562 PRELIMINARY; PRT; 170 AA.
AC Q32562;
DT 01-JAN-1998 (TrEMBLrel. 05, Created)
DT 01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein (Fragment).
OS Escherichia coli.
OC Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC Enterobacteriaceae; Escherichia.
OX NCBI_TaxID=562;
RN [1]
RN SEQUENCE FROM N.A.
RC STRAIN=K-12;
RX MEDLINE=91114703; PubMed=1989883;
RA Niki H., Jaffe A., Imamura R., Ogura T., Hiraga S.;
RT "The new gene mukB codes for a 177 kDa protein with coiled-coil
domains involved in chromosome partitioning of E.coli."
RL EMBO J. 10:183-193(1991).
RN [2]
RN SEQUENCE FROM N.A.
RC STRAIN=K-12;
RX MEDLINE=94232180; PubMed=7513784;
RA Feng J., Yamanaka K., Niki H., Ogura T., Hiraga S.;
RT "New killing system controlled by two genes located immediately
upstream of the mukB gene in Escherichia coli."
RL Mol. Gen. Genet. 243:136-147(1994).
```

[3]
RP SEQUENCE FROM N.A.
RC STRAIN-K-12;
RX MEDLINE=96679493; PubMed=8566713;
RY Yamanaka K., Niki H., Ogura T., Hiraga S.;
RT "Characterization of the sntA gene encoding an S-adenosylmethionine-
dependent methyltransferase of *Escherichia coli*.";
RL FEMS Microbiol. Lett. 133:59-63(1995).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN-K-12;
RX MEDLINE=96180640; PubMed=8602138;
RY Yamanaka K., Niki H., Ogura T., Hiraga S.;
RT "Identification of two new genes, mukE and mukF, involved in
PT chromosome partitioning in *Escherichia coli*.";
RL Mol. Gen. Genet. 250:241-251(1996).
DR EMBL; D26440; BAA21122.1; -;
DR InterPro; IPR003848; DUF218.
DR Pfam; PF02698; DUF218; 1.
KW Hypothetical protein.
FT NON_TER 170 170
SQ SEQUENCE 170 AA; 18835 MW; 2F118B16A2F371DC CRC64;

Query Match 3.8%; Score 7; DB 2; Length 170;
Best Local Similarity 100.0%; Pred. No. 76;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWJALLL 21
DB 46 GWJALLL 52

RESULT 41
ID O00486 PRELIMINARY; PRT; 171 AA.
AC O00486;
DT 01-JUL-1997 (TrEMBLrel. 04, Created)
DT 01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Putative collagen homolog protein-b.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97459673; PubMed=9315633;
RA Zhang L., Pagano J.S.;
RT "IRF-7, a new interferon regulatory factor associated with Epstein-
RT Barr virus latency.";
RL Mol. Cell. Biol. 17:5748-5757(1997).
DR EMBL; U53831; AA80689.1; -;
DR GO; GO:0036564; F:transcriptional repressor activity; TAS.
DR GO; GO:0016481; P:negative regulation of transcription; TAS.
KW Collagen.
SQ SEQUENCE 171 AA; 17466 MW; 03A722EB83D33C2 CRC64;

Query Match 3.8%; Score 7; DB 4; Length 171;
Best Local Similarity 100.0%; Pred. No. 76;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 GPEAAAL 12
DB 110 GPEAAAL 116

RESULT 42
ID O8K3C8 PRELIMINARY; PRT; 176 AA.
AC O8K3C8;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)

DE Hypothetical protein.
GN 251009H09RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA Strausberg R.;
RL Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC022703; AAH22703.1; -;
DR MGD; MGI:1923839; 251009H09RIK.
DR GO; GO:0007165; P:signal transduction; IEA.
DR InterPro; IPR000488; Death.
DR Pfam; PF00531; death; 1.
DR SMART; SM00005; DEATH; 1.
DR PROSITE; PS50017; DEATH_DOMAIN; 1.
KW Hypothetical protein.
SQ SEQUENCE 176 AA; 19839 MW; 5A45A1244A23FDE7 CRC64;

Query Match 3.8%; Score 7; DB 11; Length 176;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 83 LASHLGL 89
DB 91 LASHLGL 97

RESULT 43
Q919M1 PRELIMINARY; PRT; 178 AA.
ID Q919M1;
AC Q919M1;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE CUN056 hypothetical protein.
GN CUN056.
OS Culex nigripalpus baculovirus.
OC Viruses; dsDNA viruses, no RNA stage; Baculoviridae.
OX NCBI_TaxID=130556;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Florida1997;
RX MEDLINE=21486885; PubMed=11602755;
RA Afonso C.J., Tulman E.R., Lu Z., Balinsky C.A., Moser B.A.,
RA Becnel J.J., Rock D.L., Kutish G.F.;
RT "Genome Sequence of a Baculovirus Pathogenic for *Culex nigripalpus*.";
RL J. Virol. 75:11157-11165(2001).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Florida1997;
RA Afonso C.J., Tulman E.R., Lu Z., Balinsky C.A., Moser B.A.,
RA Becnel J.J., Rock D.L., Kutish G.F.;
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF403738; AAK94134.1; -;
KW Hypothetical protein.
SQ SEQUENCE 178 AA; 19449 MW; 5CCB95FC15B713D1 CRC64;

Query Match 3.8%; Score 7; DB 12; Length 178;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 28 CSFSLPA 34
DB 152 CSFSLPA 158

RESULT 44
ID O81265 PRELIMINARY; PRT; 180 AA.
AC O81265;
DT 01-NOV-1998 (TrEMBLrel. 08, Created)

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DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE CAMP responsive e-ement binding protein (Fragment).
OS Cichorium intybus (Chicory).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC campanulids; Asterales; Asteraceae; Cichorioideae; Cichorieae;
OC Cichorium.
OX NCBI_TaxID=13427;
RN [1]
RP SEQUENCE FROM N.A.
RA Messiaen J., Draye M., Bellefontaine F., Van Cutsem P.;
RL Submitted (MAY-1998) to the EMBL/GenBank/DBJ databases.
RL EMBL; AF067187; AAC24123.1; -.
DR GO; GO:0005634; C:nucleus; IEA.
DR GO; GO:0003677; F:DNA binding; IEA.
DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR InterPro; IPR004827; TF_EZIP.
DR Pfam; PF00170; bZIP; 1.
FT NON_TER 1
FT NON_TER 180
SQ SEQUENCE 180 AA; 20262 MW; ACA58BC830BB5888 CRC64;

Query Match 3.8%; Score 7; DB 10; Length 180;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 84 ASHGLGP 90
DB 49 ASHGLGP 55

RESULT 45
Q8S141
ID Q8S141 PRELIMINARY; PRT; 180 AA.
AC Q8S141
DT 01-JUN-2002 (TrEMBLrel. 21, Created)
DT 01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DE P0042A10.24 protein.
GN P0042A10.24.
OS Oryza sativa (japonica cultivar-group).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
OC Ehrhartoideae; Cryzeae; Oryza.
OX NCBI_TaxID=39947;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=cv. Nipponbare;
RA Sasaki T., Matsumoto T., Yamamoto K.;
RT "Oryza sativa (japonica cultivar-group) genomic DNA, chromosome 1, PAC
RT clone:P0042A10."
RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AP003343; BAE90082.1; -.
DR Gramene; Q8S141; -.
SQ SEQUENCE 180 AA; 19779 MW; EB3CAFF6F6B98706 CRC64;

Query Match 3.8%; Score 7; DB 10; Length 180;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 31 SLPSSL 37
DB 106 SLPSSL 112

RESULT 46
Q9Y2B0
ID Q9Y2B0 PRELIMINARY; PRT; 182 AA.
AC Q9Y2B0
DT 01-NOV-1999 (TrEMBLrel. 12, Created)
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)

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DE Type II membrane protein (Sapoin-like protein).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Yokoyama-Kohayashi M., Yamaguchi T., Sekine S., Kato S.;
RX MEDLINE=99173880; PubMed=10072769;
RT "Selection of cDNAs encoding putative type II membrane proteins on the
RT cell surface from a human full-length cDNA bank.";
RL Gene 228:161-167(1999).
RN [2]
RP SEQUENCE FROM N.A.
RA Barnhauser B.C., Olsson P.-A., Lindholm D.;
RT "MSAP is a novel sapoin-like protein that interacts with MTR and
RT stimulates neurite outgrowth.";
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB015631; BAA76498.1; -.
DR EMBL; AV032624; AAK38148.1; -.
DR Genew; HGNC:13529; TMEM4.
DR GO; GO:0005887; C:integral to plasma membrane; TAS.
DR InterPro; IPR000886; Ex-target_S.
DR InterPro; IPR008139; SaposinB.
DR PROSITE; PS00014; ER_TARGET; 1.
SQ SEQUENCE 182 AA; 20652 MW; BE726D302490733F CRC64;

Query Match 3.8%; Score 7; DB 4; Length 182;
Best Local Similarity 100.0%; Pred. No. 80;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 GWLALL 21
DB 5 GWLALL 11

RESULT 47
Q9JMN5
ID Q9JMN5 PRELIMINARY; PRT; 182 AA.
AC Q9JMN5
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Hypothetical protein.
GN GP6.
OS Bacteriophage WO.
OC Viruses.
OX NCBI_TaxID=112596;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20532614; PubMed=11080372;
RA Masui S., Kamoda S., Sasaki T., Ishikawa H.;
RT "Distribution and evolution of bacteriophage WO in Wolbachia, the
RT endosymbiont causing sexual alterations in arthropods.";
RL J. Mol. Evol. 51:491-497(2000).
DR EMBL; AB036666; BAA89632.1; -.
DR Hypothetical protein.
SQ SEQUENCE 182 AA; 18739 MW; 108992AA9D96D656 CRC64;

Query Match 3.8%; Score 7; DB 9; Length 182;
Best Local Similarity 100.0%; Pred. No. 80;
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 32 LPASSLS 38
DB 118 LPASSLS 124

RESULT 48
Q9QXT0
ID Q9QXT0 PRELIMINARY; PRT; 182 AA.
AC Q9QXT0;

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DT 01-MAY-2000 (TReMBLrel. 13, Created)
 DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)
 DT 01-CCT-2003 (TReMBLrel. 25, Last annotation update)
 DE Putative secreted protein ZS1G9 (5330432A10RIK protein) (Transmembrane protein 4).
 GN TME4 OR ZS1G9 OR 5330432A10RIK.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Sheppard P., Jelinek L., Whitmore T., Blumberg H., Lehner J., O'Hara P.;
 RT "Mus musculus putative secreted protein.";
 RL Submitted (SEP-1999) to the EMBL/GenBank/DBJ databases.
 RN [2]
 RN SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Pituitary, Pancreas, Embryo, and Hippocampus;
 RX MEDLINE=21085660; PubMed=11217851;
 RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Kono H., Adachi J., Fukuda S., Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamana K. I., Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R., Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H., Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J., Schriml L.M., Staebli F., Suzuki R., Tomita M., Wagner L., Washio T., Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G., Blake J., Boffelli D., Bojunga N., Cantlinci P., de Bonaldo M.F., Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F., Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L., Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S., Hayashizaki Y.;
 RT "Functional annotation of a full-length mouse cDNA collection.";
 RL Nature 409:695-690(2001).
 RN [3]
 RN SEQUENCE FROM N.A.
 RC TISSUE=Breast tumor;
 RA Strausberg R.;
 RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF186115; AAF01433.1; -;
 DR EMBL; AK019927; BAB31921.1; -;
 DR EMBL; AK007914; BAB25346.1; -;
 DR EMBL; AK013014; BAB28597.1; -;
 DR EMBL; AK013568; BAB28909.1; -;
 DR EMBL; BC008261; AAH08261.1; -;
 DR MGD; MGI:1928477; Tmem4.
 DR InterPro; IPR000886; ER_target_S.
 DR InterPro; IPR008139; SaposinB.
 DR PROSITE; PS00014; ER_TARGET; 1.
 SQ SEQUENCE 182 AA; 20767 MW; 83E54E7F1EB9B87 CRC64;

 Query Match 3.8%; Score 7; DB 11; Length 182;
 Best Local Similarity 100.0%; Pred. No. 80;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 Qy 15 GWLALL 21
 Db 5 GWLALL 11
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 RESULT 49
 O00485 PRELIMINARY; PRT; 200 AA.
 AC O00485;
 DT 01-JUL-1997 (TReMBLrel. 04, Created)
 DT 01-JUL-1997 (TReMBLrel. 04, Last sequence update)
 DT 01-JUN-2003 (TReMBLrel. 24, Last annotation update)

DE Putative collagen homolog protein-a.
 OS Homo sapiens (HUMAN).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Zhang L., Pagano J.S.;
 RT "IRF-7, a new interferon regulatory factor associated with Epstein-Barr virus latency";
 RL Mol. Cell. Biol. 17:5748-5757(1997).
 DR EMBL; U53830; AAB80687.1; -;
 DR GO; GO:0016481; 2-negative regulation of transcription; TAS.
 KW Collagen.
 SQ SEQUENCE 200 AA; 20607 MW; 7B5DD5F8308061E7 CRC64;

 Query Match 3.8%; Score 7; DB 4; Length 200;
 Best Local Similarity 100.0%; Pred. No. 87;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 Qy 6 GPBAAAL 12
 Db 139 GPBAAAL 145
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 RESULT 50
 Q98HS8 PRELIMINARY; PRT; 204 AA.
 ID Q98HS8
 AC Q98HS8;
 DT 01-OCT-2001 (TReMBLrel. 18, Created)
 DT 01-OCT-2001 (TReMBLrel. 18, Last sequence update)
 DT 01-JUN-2003 (TReMBLrel. 24, Last annotation update)
 DE Hypothetical protein ml12727.
 GN ML12727.
 OS Rhizobium loti (Mesorhizobium loti).
 OC Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
 OC Phyllobacteriaceae; Mesorhizobium.
 OX NCBI_TaxID=381;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=MAFF303099;
 RX MEDLINE=21082930; PubMed=11214968;
 RA Kaneko T., Nakamura Y., Sato S., Asamizu E., Kato T., Sasamoto S., Matanabe A., Idegawa K., Ishikawa A., Kawashima K., Kimura T., Kishida Y., Kiyokawa C., Kohara M., Matsumoto M., Matsuno A., Mochizuki Y., Nakayama S., Nakazaki N., Shimpō S., Sugimoto M., Takeuchi C., Yamada M., Tabata S.;
 RT "Complete genome structure of the nitrogen-fixing symbiotic bacterium Mesorhizobium loti";
 RL DNA Res. 7:331-338(2000).
 DR EMBL; AP003000; BAB49788.1; -;
 DR InterPro; IPR000086; NUDIX_hydrolase.
 DR InterPro; IPR000059; UPP0035.
 DR Pfam; PF00293; NUDIX; 1.
 DR PROSITE; PS01293; UPP0035; 1.
 KW Hypothetical protein; Complete proteome.
 SQ SEQUENCE 204 AA; 22948 MW; A04D5F818F811501 CRC64;

 Query Match 3.8%; Score 7; DB 16; Length 204;
 Best Local Similarity 100.0%; Pred. No. 89;
 Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 Qy 7 PEAALR 13
 Db 90 PEAALR 96
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 Search completed: June 14, 2004, 08:08:13
 Job time : 42 secs